STANDARD SIX

TERM - III

VOLUME - 3

HISTORY

CONTENTS

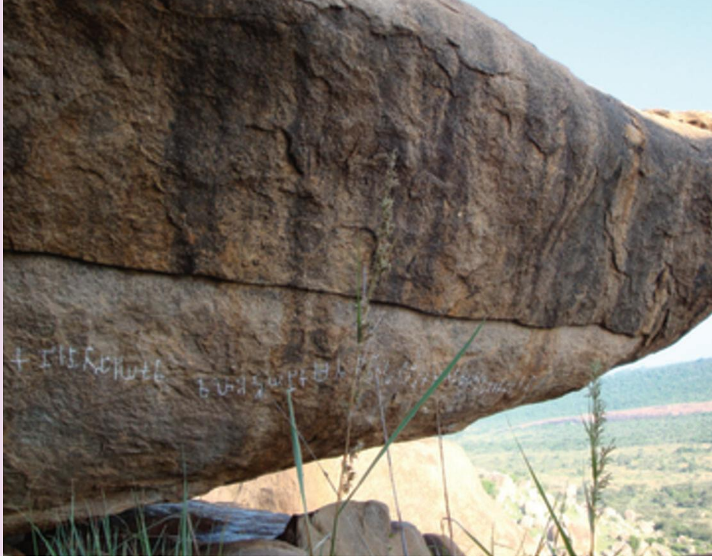
Unit	Titles	Page No.	Month
History			
1.	Society and Culture in Ancient Tamizhagam:The Sangam Age	87	January
2.	The Post-Mauryan India	100	February
3.	The Age of Empires: Guptas and Vardhanas	112	February March
4.	South Indian Kingdoms	128	March April
Geography			
1.	Asia and Europe	143	January
2.	Globe	171	February
3.	Understanding Disaster	188	March
Civics			
1.	Democracy	196	January
2.	Local Bodies – Rural and Urban	203	February
3.	Road Safety	212	March

E - Book

Assessment

Unit 1

Society and Culture in Ancient Tamizhagam: The Sangam Age



Learning Objectives

- To understand that Sangam Tamil literature is the main source for the study of ancient Tamil society
- To know the rule of Muvendars (Three Great Kings) – the Chera, Chola and the Pandya kings – and their contemporary minor chieftains
- To gain an understanding of the administrative system and the socio-economic conditions of Tamizhagam
- To learn about the Kalabhra period

The Sangam Age

The word 'Sangam' refers to the association of poets who flourished under the royal patronage of the Pandya kings at Madurai. The poems composed by these poets are collectively known as Sangam literature. The period in which these poems were composed is called the Sangam Age.

ArumugaNavalar (Jaffna), U.V.Swaminatha Iyer and Damodharam Pillai (Jaffna) strove hard and spent many years in retrieving and publishing the Tamil classics and the ancient Tamil texts, which were originally present as palm leaf manuscripts.

Sources

Inscriptions	Hathigumpha Inscription of King Karavela of Kalinga, Pugalur (near Karur) Inscription, Ashokan Edicts II and XIII, and inscriptions found at Mangulam, Alagarmalai and Kilavalavu (all near Madurai)
Copper Plates	Velvikudi and Chinnamanur copper plates

Coins	Issued by the Cheras, Cholas, Pandyas and the chieftains of Sangam Age as well as the Roman coins
Megalithic Monuments	Burials and Hero stones
Excavated Materials from	Adichanallur, Arikamedu, Kodumanal, Puhar, Korkai, Alagankulam, Uraiyur
Literary Sources	*Tholkappiyam, Ettuthogai* (eight anthologies), *Pathupattu* (ten idylls), *PathinanKeezhkanakku* (a collection of eighteen poetic works), *Pattinapalai* and *Maduraikanji*. Epics *Silapathikaram* and *Manimegalai*.
Foreign Notices	*The Periplus of the Erythrean Sea*, Pliny's *Natural History,* Ptolemy's *Geography*, Megasthenes's *Indica*, *Rajavali*, *Mahavamsa* and *Dipavamsa*

Tholkappiyam is a work on Tamil grammar. It represents the quality of Tamil language and the culture of Tamil people of the Sangam Age.

Time Span	3rd century BC (BCE) to c. 3rd century AD (CE)
Tamizhagam	Vengadam (Tirupathi hill) in the north to Kanyakumari (Cape Comorin) in the south, Bounded by sea on the east and the west.
Age	Iron Age
Culture	Megalithic
Polity	Monarchy
Dynasties ruled	The Cheras, the Cholas and the Pandyas

George L. Hart, Professor of Tamil language at the University of California, has said that Tamil is as old as Latin. The language arose as an entirely independent tradition with no influence of other languages.

Cheras

Muvendars (Three Great Kings) ruled the territories of Tamizhagam during the Sangam Age. The Tamil word 'Vendar' was used to refer to three dynasties, namely the Cheras, Cholas and Pandyas. The Cheras ruled over the central and north Travancore, Cochin, south Malabar and Kongu region of Tamil Nadu. The *Pathitrupathu* (a collection of ten decades of verses) provides information about the Chera kings. It is known that the Chera king Senguttuvan went on a military expedition to North India. He brought stones from the Himalayas for making the idol of Kannagi, an epic character from *Silappathikaram*. He introduced *pattini* cult. Cheran Senguttuvan's younger brother was Ilango Adigal. He was the author of *Silappathikaram*. Another Chera king, Cheral Irumporai, issued coins in his name. Some Chera coins bear their emblem of bow and arrow.

Prominent Chera Rulers

- Udayan Cheralathan
- Imayavaramban Netun Cheralathan
- Cheran Senguttuvan
- Cheral Irumporai

Cholas

The Chola kingdom of Sangam period extended upto Venkatam (Tirupathi hills). The Kaveri delta region remained the central part of the kingdom. This area was later known as Cholamandalam. KarikalValavan or Karikalan was the most famous of the Chola kings. He defeated the combined army of the Cheras, Pandyas and the eleven Velir chieftains who supported them at Venni, a small village in the Thanjavur region.

He converted forests into cultivable lands. He built Kallanai (meaning a dam made of stone) across the river Kaveri to develop agriculture. Their port Puhar attracted merchants from various regions of the Indian Ocean. The *Pattinapaalai*, a poetic work in the *Pathinenkeezhkanakku*, gives elaborate information of the trading activity during the rule of Karikalan.

Kallanai

It was a dyke, built with stones. It was constructed across the Kaveri to divert water throughout the delta region for irrigation. When it was built, Kallanai irrigated an area of about 69,000 acres.

Prominent Chola Rulers

- Ilanchetsenni
- KarikalValavan
- Kocengannan
- KilliValavan
- Perunarkilli

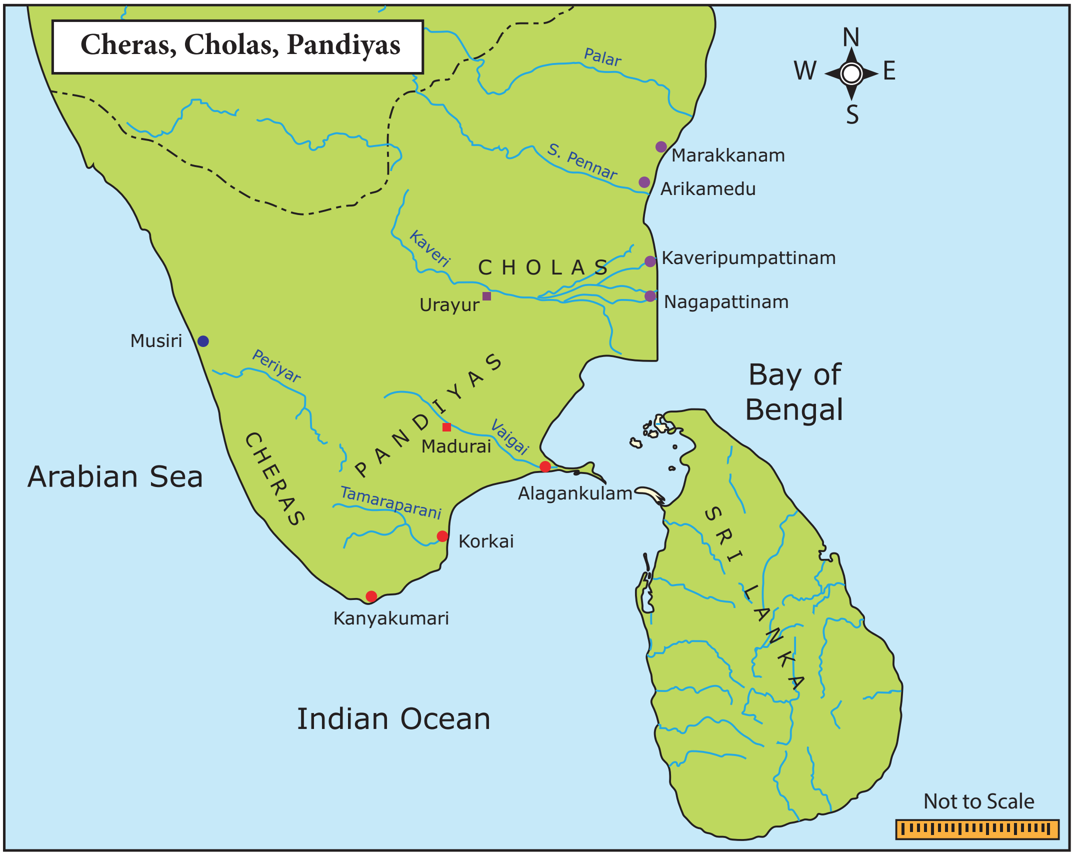
Pandyas

The Pandyas ruled the present-day southern Tamil Nadu. The Pandya kings patronized the Tamil poets and scholars. Several names of Pandya kings are mentioned in the Sangam literature. Nedunchezhiyan is hailed as the most popular warrior. He defeated the combined army of the Chera, Chola and five Velir Chieftains at Talayalanganam. He is praised as the lord of Korkai.

Pandya country was well known for pearl hunting. Pandya kings issued many coins. Their coins have elephant on one side and fish on another side. MudukudimiPeruvazhuthi issued coins to commemorate his performance of many Vedic rituals.

Prominent Pandya Rulers

- Nediyon
- Nanmaran
- MudukudumiPeruvazhuthi
- Nedunchezhiyan



The Titles Assumed by the Muvendars

- Adhavan
- Kuttuvan
- Vanavan
- Irumporai
- Senni
- Sembiyan
- Killi
- Valavan
- Maran
- Valuthi
- Sezhiyan
- Tennar

Royal Insignia

Sceptre (*kŌl*), drum (*murasu*) and white umbrella (*venkudai*) were used as the symbols of royal authority.

Muvendar	Garland	Port	Capital	Symbols
Cheras	Palmyra flower	Muziri / Tondi	Vanchi / Karur	Bow and arrow
Cholas	Fig (Athi) lower	Puhar	Uraiyur / Puhar	Tiger
Pandyas	Margosa (neem) flower	Korkai	Madurai	Two Fish

Minor Chieftains – Ay, Velir and Kizhar

Apart from three great kings, there were several brave independent minor chieftains called Velirs.

The famous Velirs were the seven patrons (*KadaiyezhuVallalgal*). They were Pari, Kari, Ori, Pegan, Ay, Adiyaman and Nalli. They were popular for their generous patronage of Tamil poets.

Kizhar was the village chief.

Sangam Polity

Kingship

The kingship was hereditary. The king was called *k*Ō. It is the shortened form of *Kon*. *Vendan, Kon, Mannan, Kotravan* and *Iraivan* were the other titles by which the king was addressed. The eldest son of the reigning king generally succeeded to the throne. The coronation ceremony was known as *arasukattilerudhal* or *mudisoottuvila*. The crown prince was known as *komahan*, while the young ones were known as *Ilango, Ilanchezhiyan* and

Ilanjeral. King held a daily durbar (*naal-avai*) at which he heard and resolved all the disputes. The income to the state was through taxation. Land tax was the main source of revenue and it was called '*Irai'.* This apart, the state collected tolls and customs (*sungam*), tributes and fines.

The kings and soldiers wore the heroic anklet (Veera kazhal). On the anklet, the name and achievement of the wearer were blazoned. Spies were used not only to find out what was happening within the country, but also in foreign countries.

A wound in the back was considered a disgrace and there are instances of kings fasting unto death because they had suffered such a wound in the battle.

The Court

The king's court was called *Arasavai.* The king occupied a ceremonious throne in the court called *Ariyanai*. In the court, the king was surrounded by officials, distinguished visitors and court poets. The rulers had five-fold duties. They were encouraging learning, performing rituals, presenting gifts, protecting people and punishing the criminals. Ambassadors were employed by the kings. They played a significant role. The king was assisted by a number of officials. They were divided into *Aimperunguzhu* (five-member committee) and *Enberaayam* (eight-member group).

Army

The king's army consisted of four divisions, namely, infantry, cavalry, elephants and chariot force. The army was known as '*Padai'.* The chief of the army was known as *Thanaithalaivan.* The prominent weapons used during this period were sword, *kedayam* (shield), *tomaram* (lance), spears, bows and arrows. *Tomaram* is mentioned as a missile to be thrown at the enemy from a distance. The place where the weapons were kept was known as *paddaikottil*. The forts were protected by deep moats and trenches. The war drum was worshipped as a deity.

Law and Justice

The king was the final authority for appeal. In the capital town, the court of justice was called *Avai*. In the villages, *Mandram* served as the place for dispensing justice. Punishment was always severe. Execution was ordered for theft cases. The punishment awarded for other crimes included beheading, mutilation of the offending limbs of the body, torture and imprisonment and imposition of fines.

Local Administration

The entire kingdom was called *Mandalam*. Mandalam was divided into *Nadus*. *Kurram* was subdivision of Nadu. The *Ur* was a village, classified into *perur* (big village), *Sirur* (a small village) and *Mudur* (an old village) depending upon its population, size and antiquity. *Pattinam* was the name for a coastal town and *Puhar* was the general term for harbour town.

Important Towns

Puhar, Uraiyur, Korkai, Madurai, Muziri, Vanji or Karur and Kanchi.

Thinai (tract)-based Sangam Society

The land form was divided into five *thinai*s (eco-regions).

Eco-region (*thinai*)	Landscape	Occupation	People	Deity
Kurinji	Hilly region	Hunting /gathering	Kuravar/kurathiyar	Murugan
Mullai	Forest region	Herding	Aayar/aaichiyar	Maayon
Marutham	Riverine track (plains)	Agriculture	Uzhavan/uzhathiyar	Indiran
Neithal	Coastal region	Fishing/saltmaking	Parathavar/ nulathiyar	Varunan
Palai	Parched land	Heroic deeds	Maravar/Marathiyar	Kotravai

Land was classified according to its fertility. Marutham was called *menpulam* (fertile land). It produced paddy and sugarcane. The rest of the landscape, excluding Neithal, was called *vanpulam* (hard land), and it produced pulses and dry grains.

Status of Women

There was no restriction for women in social life. There were learned and wise women. Forty women poets had lived and left behind their valuable works. Marriage was a matter of self-choice. However, chastity (*karpu)* was considered the highest virtue of women. Sons and daughters had equal shares in their parents' property.

Women Poets of Sangam Age

Avvaiyar, Velli Veethiyar, Kakkaipadiniyar, Aathi Manthiyar, Pon Mudiyar.

Religious Beliefs and Social Divisions

The primary deity of the Tamils was Seyon or Murugan. Other gods worshipped during Sangam period were Sivan, Mayon (Vishnu), Indiran, Varunan and Kotravai. The Hero stone (*natukkal*) worship was in practice. Buddhism and Jainism also co-existed.

Veerakkal/Natukkal

The ancient Tamils had a great respect for the heroes who died in the battle field. The hero stones were erected to commemorate heroes who sacrificed their lives in war.

Caste did not develop in Tamizhagam as it did in the northern India. Varuna system (occupation-based caste) came to the Dravidian south comparatively late.

Dress and Ornaments

The rich people wore muslin, silk and fine cotton garments. The common

people wore two pieces of clothes made of cotton. The Sangam literature refers to clothes (*Kalingam*, which were thinner than the skin of a snake. Women adorned their hair plaits with flowers. Both men and women wore a variety of ornaments. They were made of gold, silver, pearls, precious stones, conch shells and beads. The People were fond of using aromatic perfumes.

Arts

There are many references to variety of musical instruments such as drum, flute and yazh. Karikalan was master of seven notes of music (*EzhisaiVallavan*). Singing bards were called *panar and viraliyar.* Dancing was performed by *kanigaiyar*. *Koothu* (folk drama) was the most important cultural practice of the people of Sangam Age. They developed the concept of *Muthamizh* (*Iyal, Isai, Naatakam*).

Occupation

The major occupations of the people were: agriculture, cattle rearing, fishing and hunting. Other craftsmen like carpenter, blacksmith, goldsmith, and potters were also part of the population. Weaving was the most common part-time occupation of the farmers and a regular full time job for many others.

Festivals and Entertainments

People celebrated several festivals. The harvest festival (Pongal) and the festival of spring, kaarthigai were some of them. Indira vizha was celebrated in the capital. There were many amusements and games. This included dances, festivals, bull fights, cock fights, dice, hunting, wrestling and playing in swings. Children played with toy cart and with the sand houses made by them.

Trade

Trade existed at three levels: local, overland and overseas. The extensive and lucrative foreign trade that Tamizhagam enjoyed during this period stands testimony to the fact that Tamils had been great seafarers. Warehouses for storing the goods were built along the coast. The chief ports had light houses, which were called *KalangaraillanguSudar*. Caravans of merchants carried their merchandise to different places in oxen-driven carts. Barter system was prevalent.

Malabar Black Pepper

When the Mummy of Ramses II of the Egypt was uncovered, archaeologists found black pepper corns stuffed into his nostrils and in his abdomen (as a part of embalming process practised in olden days).

There were two kinds of markets or bazaars in the leading cities like Puhar and Madurai. In Madurai they were Nalangadi (the morning market) and Allangadi (the evening market). In these markets large varieties as well as large quantities of goods were sold and purchased.

Major Ports

- Musiri, Tondi, Korkai

Main Exports

- Salt, pepper, pearls, ivory, silk, spices, diamonds, saffron, precious stones, muslin, sandal wood

Main Imports

- Topaz, tin, glass, horses

> Silk supplied by Indian merchants to the Roman Empire was considered so important that the Roman emperor Aurelian declared it to be worth its weight in gold.

> **Muziris – First Emporium**
>
> The Roman writer Pliny the Elder writes of Muziris in his *Natural History* as the 'first emporium (shopping complex) of India'. A temple of Augustus was built at Muziris, which had a Roman colony.
>
> A papyrus document (now in Vienna museum) of 2nd century BC (BCE) records the agreement between two merchants' shippers of Alexandria and Muziris.

Trade Contact with Overseas Countries

Archaeological excavations have confirmed the trading relations between the Tamizhagam and the countries such as Greece, Rome, Egypt, China, South East Asia and Sri Lanka.

Kalabhras

Towards the end of the 3rd century AD (CE), the Sangam period slowly went into a decline. Following the Sangam period, the Kalabhras had occupied the Tamil country for about two and half centuries. We have very little information about Kalabhras. They left neither artefacts nor monuments. But there is evidence of their rule in literary texts. The literary sources for this period include *Tamil Navalar Charithai, Yapernkalam* and *Periapuranam*. *Seevaka Chinthamani* and *Kundalakesi* were also written during this period. In Tamizhagam, Jainism and Buddhism became prominent during this period. Many works under *Pathinen Keezhkanakku* were composed. Trade and commerce continued to flourish during this period. So the Kalabhra period is not a dark age, as it is portrayed.

Elsewhere

Gateway
Han Dynasty – China
206 BC(BCE) – 220 AD(CE)

Pyramid
Mayan Civilisation
Central America

Colosseum
Roman Civilisation – Italy
3rd BC(BCE) – 1st AD(CE)

Summary

- The word 'Sangam' refers to the association of poets who flourished under the royal patronage of the Pandya kings at Madurai.
- Muvendars – the Cheras, Cholas and the Pandyas–controlled the territories of Tamizhagam during the Sangam Age.
- Apart from three great monarchs, Tamil country was ruled by several independent minor chieftains.
- Archaeological excavations have confirmed the trading relations between Tamizhagam and many foreign countries.
- Towards the end of the 3rd century AD (CE), the Sangam period slowly started to decline. The Kalabhras occupied the Tamil country. Evidence of their rule is available in Jain and Buddhist literature.

GLOSSARY

Strove	-	tried hard	-	கடும் முயற்சி
Dynasty	-	a line of hereditary rulers	-	ராஜ வம்சம்
Commemorate	-	to honour the memory of	-	கௌரவிப்பதற்காக
Royal insignia	-	symbols of power	-	அரச சின்னம்
Patronage	-	support given by a patron	-	ஆதரவு
Blazoned	-	displayed vividly	-	வெளிக்காட்டுதல்
Acquitted	-	released	-	விடுதலை
Bards	-	poets singing in praise of princes and brave men	-	புலவர்கள்
Warehouses	-	a large building for keeping goods	-	சேமிப்புக் கிடங்கு
Portrayed	-	described elaborately	-	சித்தரிக்கப்பட்டுள்ளது

Exercise

I.Choose the correct answer

1. Pattini cult in Tamil Nadu was introduced by ______________.

   a) Pandyan Neduncheliyan   b) Cheran Senguttuvan
   c) Ilango Adigal   d) Mudathirumaran

2. Which dynasty was not in power during the Sangam Age?

   a) Pandyas   b) Cholas
   c) Pallavas   d) Cheras

3. The rule of Pandyas was followed by ______________

   a) Satavahanas   b) Cholas
   c) Kalabhras   d) Pallavas

4. The lowest unit of administration during the Sangam Age was______________

   a) Mandalam   b) Nadu
   c) Ur   d) Pattinam

5. What was the occupation of the inhabitants of the Kurinji region?

   a) Plundering   c) Cattle rearing
   c) Hunting and gathering   d) Agriculture

II. Read the Statement and tick the appropriate answer

1. **Assertion (A):** The assembly of the poets was known as Sangam.

   Reason (R): Tamil was the language of Sangam literature.

   a) Both A and R are true. R is the correct explanation of A.

   b) Both A and R are true. R is not the correct explanation of A.

   c) A is true but R is false.

   d) Both A and R is not true.

2. Which of the following statements are not true?

   1. Karikala won the battle of Talayalanganam.

   2. The Pathitrupathu provides information about Chera Kings.

   3. The earliest literature of the Sangam age was written mostly in the form of prose.

   a) 1 only

   b) 1 and 3 only

   c) 2 only

3. The ascending order of the administrative division in the ancient Tamizhagam was

   a) Ur< Nadu < Kurram < Mandalam

   b) Ur < Kurram < Nadu <Mandalam

   c) Ur <Mandalam < Kurram < Nadu

   d) Nadu < Kurram < Mandalam <Ur

4. Match the following dynasties with the Royal Insignia

   A) Chera - 1. Two Fish

   B) Chola - 2. Tiger

   C) Pandya - 3. Bow and arrow

   a) 3 2 1

   b) 1 2 3

   c) 3 1 2

   d) 2 1 3

III. Fill in the blanks

1. The battle of Venni was won by ____________________.
2. The earliest Tamil grammar work of the Sangam period was_____________.
3. _______________built Kallanai across the river Kaveri.
4. The chief of the army was known as _________________
5. Land revenue was called ______________

IV. True or False

1. The singing bards of the Sangam age were called Irular.
2. Caste system developed during the Sangam period.
3. Kizhar was the village chief.
4. Puhar was the general term for city.
5. Coastal region was called Marudham.

V.Match

a. Thennar - Cheras

b. Vanavar - Cholas

c. Senni - Velir

d. Adiyaman - Pandyas

VI. Answer in one or two sentences

1. Name any two literary sources to reconstruct the history of ancient Tamizhagam.
2. What was Natukkal or Virakkal?

3. Name five thinais mentioned in the Sangam literature.
4. Name any two archaeological sites related to Sangam period.
5. Name the seven patrons (Kadaiyelu Vallalgal).
6. Name any three Tamil poetic works of Kalabhra period.

VII. Answer the following

1. Discuss the status of women in the Sangam Society.

VIII. HOTs

1. Karikal Valavan is regarded as the greatest Chola king. Justify.
2. The period of Kalabhra is not a dark age. Give reasons.

IX. Map Work

1. Mark and colour the extent of Chera, Chola and Pandya empires on the river map of South India.
2. Mark the following places.

   Korkai, Kaveripoompattinam, Musiri, Uraiyur, Madurai

X.Life skill

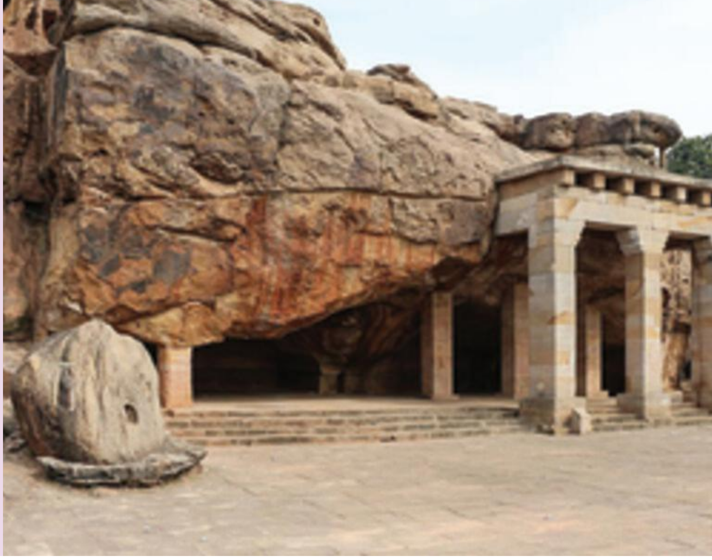
1. Collect and paste the pictures of landscape and find out the eco-region to which it belongs. Write the important crops grown and occupation of the people there.

XI. Answer Grid

Mention two epics of the Sangam period. Ans:	Name the two groups of officials who assisted the king. Ans:	Name any two women poets of the Sangam period. Ans:
Name any three major ports of Sangam age. Ans:	What constituted Muthamizh? Ans:	*Silappathikaram* was written by______________
Talayalanganam is related to which Pandya king? Ans:	Which eco-region was called menpulam? Ans:	The light houses in the ports are called______________

Unit 2

The Post-Mauryan India

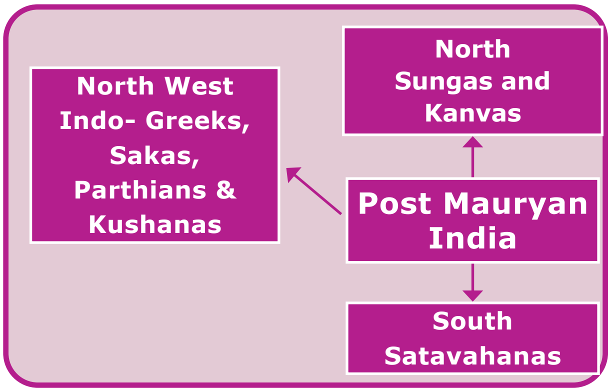


Learning Objectives

- To acquire knowledge of the history of dynasties and kingdoms that emerged after the breakup of the Mauryan Empire
- To gain an understanding of the polity, society, economy, and culture of various kingdoms that were established in the south, north and north-west of India
- To become familiar with their contributions to early medieval India

Introduction

The break-up of Mauryan Empire resulted in the invasions of Sakas, Scythians, Parthians, Indo-Greeks or Bactrian Greeks and Kushanas from the north-west. In the south, Satavahanas became independent after Asoka's death. There were Sungas and Kanvas in the north before the emergence of Gupta dynasty. In Kalinga, Chedi dynasty declared their independence.



It has to be noted here that, though Magadha ceased to be the premier state of India, it continued to be a great centre of Buddhist culture.

Sources

Archaeological Sources

Inscriptions / Copper Plates

- Ayodhya Inscription of Dana Deva
- Persepolis, Nakshi Rustam Inscriptions
- Moga(Taxila copper plate)
- Junagadh/Girnar Inscription
- Nasik *Eulogy*
- Inscription of Darius I

Coins

- Coins of Satavahanas
- Coins of Kadphises II
- Roman coins

Literary Sources

- *Puranas*
- *Gargi Samhita*
- *Harshacharita* of Banabhatta
- *Mahabhasya* of Patanjali
- *Brihastkatha* of Gunadhya
- *Madhyamika Sutra* of Nagarjuna
- *Buddhacharita* of Asvaghosha
- *Malavikagnimitra* of Kalidasa

Foreign Notice

- Accounts of Hiuen Tsang, the Chinese Buddhist monk and traveller

The Sungas and Kanvas in the North

The Sungas

The last Mauryan emperor, Brihadratha, was assassinated by his own general, Pushyamitra Sunga, who established his Sunga dynasty in Magadha. Pushyamitra made Pataliputra as his capital.

Pushyamitra's kingdom extended westward to include Ujjain and Vidisha. He successfully repulsed the invasion of Bactria king, Menander. But Menander managed to keep Kabul and Sindh.

Pushyamitra thwarted an attack from the Kalinga king Kharavela. He also conquered Vidarba. He was a staunch follower of Vedic religion. He performed two Asvamedha yagnas (horse sacrifices) to assert his imperial authority.

ZE4AN

> During the Sunga period, stone was replaced by wood in the railings and the gateways of the Buddhist *stupas* as seen in Bharhut and Sanchi.

Pushyamitra was succeeded by his son Agnimitra. This Agnimitra is said to be the hero of Kalidasa's *Malavikagnimitra*. The drama also refers to the victory of Vasumitra, Agnimitra's son, over the Greeks on the banks of the Sindhu river.

The weak successors of Sungas constantly faced threats from the Indo-Bactrians and Indo-Parthians. The Sunga dynasty lasted for about one hundred years. The last Sunga king was Devabhuti. He was killed by his own minister Vasudeva Kanva. Vasudeva established the rule of Kanva dynasty in Magadha.

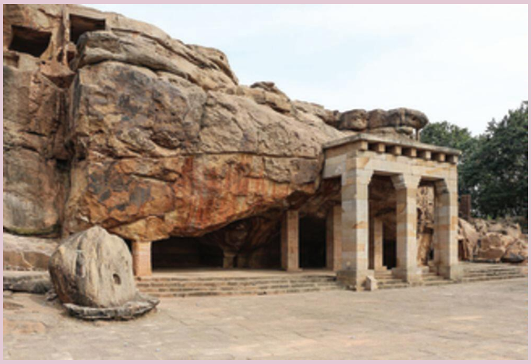
Importance of the Sunga Period

The Sungas played an important role in defending the Gangetic Valley from the encroachments of the Bactrian Greeks. Pushyamitra, and then his successors, revived Vedic religious practices and promoted Vaishnavism. Sanskrit gradually gained ascendancy and became the court language.

> Patanjali, the second grammarian in Sanskrit, was patronized by Pushyamitra.

Though Pushyamitra persecuted Buddhists, Buddhism continued to be followed in many parts of his domain.

King Kharavela of Kalinga was a contemporary of the Sungas. We get information about Kharavela from the Hathigumba Inscription.



Hathigumba – Elephant cave Inscription

The Kanvas

The Kanva dynasty produced four kings and their rule lasted only for 45 years. The history of Magadha after the fall of the Kanvas is devoid of any significance until the emergence of the Gupta dynasty.

The Kanva rulers were

- Vasudeva
- Bhumi Mitra
- Narayana
- Susarman

The last Kanva ruler Susarman was assassinated by his powerful feudatory chief of Andhra named Simuka, who laid the foundation of the Satavahana dynasty.

Satavahanas in the South

The Kushanas in the north and the Satavahanas (Andhras) in the south flourished for about 300 years and 450 years, respectively. Simuka, the founder of the Satavahana dynasty, is said to have ruled for twenty-three years. His successor was his brother Krishna. The latter and his nephew Satakarni ruled for ten years each, establishing an empire, holding control over a vast area stretching from Rajasthan in the northwest to Andhra in the southeast and from Gujarat in the west to Kalinga in the east. Satakarni is said to have performed two horse sacrifices (*Asvamedha* yagna), indicative of his imperial position.

Coin of Satavahanas

Gautamiputra Satakarni was the greatest ruler of the family. In the Nasik *eulogy*, published by his mother GautamiBalasri, Gautamiputra Satakarni is described as the destroyer of Sakas, Yavanas (Greeks) and Pahlavas (Parthians). The extent of the empire is also mentioned in the record. Their domain included Maharashtra, north Konkan, Berar, Gujarat, Kathiawar and Malwa. His ship coins are suggestive of Andhras' skill in seafaring and their naval power. The Bogor inscriptions suggest that South India played an important role in the process of early state formation in Southeast Asia.

Coins of Gautamiputra Satakarni

Contributions of Satavahanas

Literature

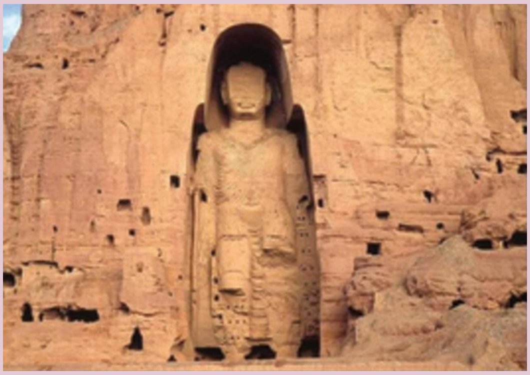
The Satavahana king Hala was himself a great scholar of Sanskrit. The Kantara school of Sanskrit flourished in the Deccan in second century B.C. Hala is famous as the author of *Sattasai (Saptasati),* 700 stanzas in Prakrit.

Art and Architecture

The Satavahana rulers were great builders. They began constructing Buddhist *stupas* in Amaravati. A bronze statue of the standing Buddha discovered in Oc-Eo (an archaeological site in Vietnam)resembles the Amaravati style. The later Satavahana kings issued lead or bronze coins depicting ships with two masts. A stone seal discovered in NakhonPathom in Thailand has the same design.

Gandhara, Madhura, Amaravati, Bodh Gaya, Sanchi and Bharhut were known for splendid monuments and art. The Mathura School of Sculpture produced images and life-size statues of the Buddhist, Brahmanical and Jain deities.

The world-famous life-size statues of Buddha at Bamyan valley on the mountains of the erstwhile northwestern frontiers of ancient India (currently in central Afghanistan and recently destroyed by the Talibans), were carved out of the solid rocks by the dedicated artists of the Gandhara School of Art during the post-Mauryan period.



Buddha at Bamyan valley

Indo-Greeks, Indo-Parthians, Sakas and Kushanas

Indo-Greeks and Indo-Parthians

After the conquest of north-western India and the Punjab region, Alexander the Great left the conquered territories under provincial governors. Two of its eastern satrapies, Bactria and Parthia, revolted under their Greek Governors and declared their independence. The satrapy of Bactria became independent under the leadership of Diodotus I and Parthia under Arsaces.

After the decline of the Mauryan empire, the Greek rulers of Bactria and Parthia started encroaching into the northwestern border lands of India. The Bactrian and Parthian settlers gradually inter-married and inter-mixed with the indigenous population. This facilitated the establishment of Indo-Greek and Indo-Parthian colonies along the north-western part of India.

Rulers of Indo Greeks

Demetrius I – He was the son of Greco-Bactrian ruler Euthydemus.

He was king of Macedonia from 294 to 288 BC (BCE). Numismatic evidence proves that Demetrius issued bi-lingual square coins with Greek on the obverse and Kharosthi on the reverse. Scholars are not able to decide which of the three, named Demetrius, was the initiator of the Yavana era, commencing from second century BC (BCE) in India.

Demetrius

Menander

Menander– He was one of the best known Indo-Greek kings. He is said to have ruled a large kingdom in the north-west of the country. His coins were found over an extensive area ranging from Kabul valley and Indus river to western Uttar Pradesh. *MilindaPanha*, a Buddhist text, is a discourse between Bactrian king Milinda and the learned Buddhist scholar Nagasena. This Milinda is identified with Menander. Menander is believed to have become a Buddhist and promoted Buddhism.

Contributions of Indo-Greeks

Coinage: Indo-Greek rulers introduced a die system and produced properly shaped coins with inscription, symbols and engraved figures on them. Indians learnt this art from them.

Sculpture: The Gandhara School of Indian Art is heavily indebted to Greek influence. The Greeks were good cave builders. The Mahayana Buddhists learnt the art of carving out caves from them and became skilled in rock-cut architecture.

Sakas

The Indo-Greek rule in India was ended by the Sakas. Sakas as nomads came in huge number and spread all over northern and western India. The Sakas were against the tribe of Turki nomads. Sakas were Scythians, nomadic ancient Iranians, and known as Sakas in Sanskrit.

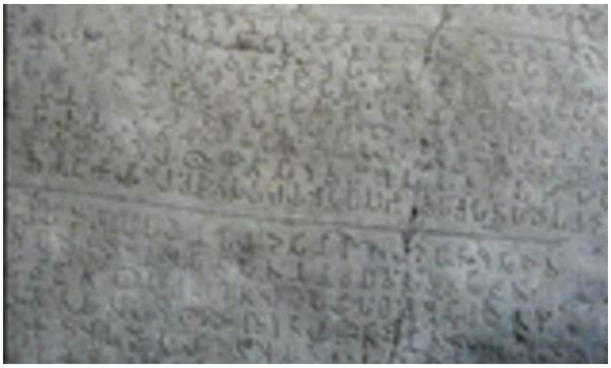
Rulers of Indo-Parthians (Pahlavas)

Indo-Parthians came after the Indo-Greeks and the Indo-Scythians who were, in turn, defeated by the Kushanas in the second half of the first century AD (CE). Indo-Parthian kingdom or Gondopharid dynasty was founded by Gondophernes. The domain of Indo-Parthians comprised Kabul and Gandhara. The name of Gondophernes is associated with the Christian apostle St.Thomas. He came to India and according to Christian tradition, visited the court of Gondophernes and embraced Christianity.

St.Thomas

Saka rule was founded by Maos or Mogain in the Gandhara region and his capital was 'Sirkap'. His name is mentioned in Mora inscription. His coins bear images of Buddha and Siva.

Rudradaman was the most important and famous king of Sakas. His Junagadh/ Girnar inscription was the first inscription in chaste Sanskrit. In India, the Sakas were assimilated into Indian society. They began to adopt Indian names and practise Indian religious beliefs.



Junagadh Inscriptions

Coin of Rudradaman

The Sakas appointed kshatrapas or satraps as provincial governors to administer their territories.

Kushanas

The Kushanas formed a section of the yueh-chi tribes, who inhabited north-western China in the remote past. In the first century BC(BCE), the yueh-chi tribes were composed of five major sections, of which the Kushanas attained political ascendancy over others.

By the beginning of Christian era, all the yueh-chi tribes had acknowledged the supremacy of the Kushanas; they had shed their nomadic habits and settled down in the Bactrian and Parthian lands, adjacent to the north-western border of India.

The Kushanas overran Bactria and Parthia and gradually established themselves in northern India. Their concentration was mostly in the Punjab, Rajaputana and Kathiawar. Kushana rulers were Buddhists. Takshashila and Mathura continued to be great centres of Buddhist learning, attracting students from China and western Asia.

The Kushana Kings

Kanishka

Kanishka was the greatest of all the Kushana emperors. He assumed the sovereignty in 78 AD and proclaimed his rule by the foundation of a new era, which later became Saka era.

The Kushana capital initially was Kabul. Later, it was shifted to Peshavar or Purushpura.

Coin of Kanishka

Rulers	Contributions
Kadphises I	He was the first famous military and political leader of the Kushanas. He overthrew the Indo-Greek and Indo-Parthian rulers and established himself as a sovereign ruler of Bactria. He extended his power in Kabul, Gandhara and upto the Indus.
Kadphises II 	He maintained friendly relationship with the emperors of China and Rome and encouraged trade and commerce with the foreign countries.

Conquests

Kanishka conquered and annexed Kashmir. He waged a successful war against Magadha. He also waged a war against a ruler of Parthia to maintain safety and integrity in his vast empire on the western and south-western border. After the conquest of Kashmir and Gandhara, he turned his attention towards China. He defeated the Chinese general Pan-Chiang and safeguarded the northern borders of India from Chinese intrusion.

His empire extended from Kashmir down to Benaras, and the Vindhya mountain in the south. It included Kashgar, Yarkhand touching the borders of Persia and Parthia.

Religious Policy

Kanishka was an ardent Buddhist. Kanishka's empire was a Buddhist empire. Kanishka adopted Buddhism under the influence of Asvaghosha, a celebrated monk from Pataliputra. Though a great warrior and an empire-builder, Kanishka was as equal as the exponent and champion of Mahayanism.

Kanishka made Buddhism as the state religion and built many stupas and monasteries in Mathura, Taxila and many other parts of his kingdom. He sent Buddhist missionaries to Tibet, China and many countries of Central Asia for the propagation of Buddha's gospel.

He organised the fourth Buddhist Council at Kundalavana near Srinagar to sort out the differences between the various schools of Buddhism. It was only in this council that Buddhism was split into Hinayanism and Mahayanism.

Art and Literature

Kanishka was a great patron of art and literature. His court was adorned with a number of Buddhist saints and scholars, like Asvaghosha, Vasumitra and Nagarjuna.

> Asvaghosha was the celebrated author of the first Sanskrit play, *Buddhacharita*.

He founded the town of Kanishkapura in Kashmir and furnished the capital of Purushapura with magnificent public buildings.

The Gandhara School of Art flourished during his time. The most favourite subject of the Gandhara artists was the carving of sculptures of Buddha.

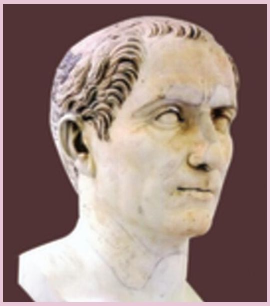
Buddhist learning and culture was taken to China and Mongolia from Takshashila. The great Asiatic culture mingled with Indian Buddhist culture during the Kushana's time.

Kanishka's successors were weak and incompetent. Kushana empire rapidly disintegrated into number of small principalities.

Elsewhere

Kushana Empire corresponded with the last days of the Roman Republic, when Julius Caesar was alive. It is said that Kushana Emperor sent a great embassy to Augustus Caesar.

Augustus Caesar



Julius Caesar

Summary

- The break-up of Mauryan empire resulted in the invasions of Sakas, Scythians, Parthians, Indo-Greeks and Kushanas from the north-west.
- The last Mauryan emperor, Brihadratha, was assassinated by his own general, Pushyamitra Sunga, who established Sunga dynasty in Magadha.
- The history of Magadha after the fall of the Kanvas is devoid of any significance until the emergence of the Gupta dynasty.
- The Kushanas in the north and the Satavahanas (Andhras) in the south flourished for about 300 years and 450 years, respectively.
- Rudradaman was the most important and famous king of Sakas.
- The best known of the Kushanas was Kanishka who was an ardent follower of Mahayana form of Buddhism. Gandhara Art developed during this period.

GLOSSARY

repulsed	driven back by force	விரட்டியடிக்கப்பட்டது
thwarted	prevent from accomplishing something	முறியடிக்கப்பட்டது
encroachments	intrusion on a person's territory, rights etc,	ஆக்கிரமிப்புகள்
renovated	Restored(something old, especially a building) to a good state of repair	புதுப்பிக்கப்பட்டது
assimilate	absorb (information, ideas or culture) fully	ஒன்றிப்போதல்
ardent	enthusiastic or passionate	தீவிர
magnificent	impressively beautiful	அற்புதமான

Exercises

I. Choose the correct answer

1. The last Mauryan emperor was killed by_________.

   a) Pushyamitra b) Agnimitra
   c) Vasudeva d) Narayana

2. _________ was the founder of Satavahana dynasty.

   a) Simuka b) Satakarani
   c) Kanha d) Sivasvati

3. _________ was the greatest of all the Kushana emperors.

   a) Kanishka b) Kadphises I
   c) Kadphises II d) Pan-Chiang

4. The Kantara School of Sanskrit flourished in the _________ during 2nd century BC.

   a) Deccan b) north-west India
   c) Punjab d) Gangetic valley

5. Sakas ruled over Gandhara region _____________ as their capital.

   a) Sirkap b) Taxila
   c) Mathura d) Purushpura

II. Match the statement with the reason and tick the appropriate answer

1. **Assertion (A):** Colonies of Indo-Greeks and Indo-Parthians were established along the north-western part of India.

   Reason (R): The Bactrian and Parthian settlers gradually intermarried and intermixed with the indigenous population.

   a) Both A and R are correct and R is the correct explanation of A.
   b) Both A and R are correct but R is not the correct explanation of A.
   c) A is correct but R is not correct.
   d) A is not correct but R is correct.

2. **Statement I:** Indo-Greek rulers introduced die system and produced coins with inscription and symbols, engraving figures on them.

   Statement II: Indo-Greek rule was ended by the Kushanas.

   a) Statement I is wrong, but statement II is correct.
   b) Statement II is wrong, but statement I is correct
   c) Both the statements are correct.
   d) Both the statements are wrong.

3.Circle the odd one

Pushyamitra, Vasudeva, Simuka, Kanishka

4.Answer the following in a word

1. Who was the last Sunga ruler?
2. Who was the most important and famous king of Sakas?
3. Who established Kanva dynasty in Magadha?
4. Who converted Gondophernes into Christianity?

III. Fill in the blanks

1.__________ was the founder of Indo-Parthian Kingdom.

2.In the South, Satavahanas became independent after ________ death.

3.Hala is famous as the author of ____________.

4.___________ was the last ruler of Kanva dynasty.

5.Kushana's later capital was___________.

IV. State whether True or False

1. Magadha continued to be a great centre of Buddhist culture even after the fall of the Mauryan Empire.
2. We get much information about Kharavela from Hathigumba inscription.
3. Simuka was the founder of Satavahana dynasty.
4. Buddhacharita was written by Asvaghosha.

V.Match the following

i) Patanjali	-	1. Kalinga
ii) Agnimitra	-	2. Indo-Greek
iii) King Kharavela	-	3. Indo-Parthians
iv) Demetrius	-	4. Second grammarian
v) Gondophernes	-	5. Malavikagnimitra

a) 4 3 2 1 5   b) 3 4 5 1 2   c) 1 5 3 4 2   d) 2 5 3 1 4

VI. Find out the wrong statement from the following

1. The Kushanas formed a section of the yueh-chi tribes who inhabited north-western China.
2. Kanishka made Jainism the state religion and built many monasteries.
3. The Great Stupa of Sanchi and the railings which enclose it belong to the Sunga period.
4. Pan-Chiang was the Chinese general defeated by Kanishka.

VII. Answer in one or two sentences

1.What happened to the last Mauryan emperor?

2.Write a note on Kalidasa's Malavikagnimitra.

3.Name the ruler of Kanva dynasty.

4.Highlight the literary achievements of Satavahanas.

5.Name the places where Satavahana's monuments are situated.

6.Give an account of the achievements of Kadphises I.

7.Name the Buddhist saints and scholars who adorned the court of Kanishka.

VIII.Answer the following

1.Who invaded India after the decline of the Mauryan empire?

2.Give an account of the conquests of Pushyamitra Sunga.

3.Write a note on Gautamiputra Satakarni.

4.What do you know of Gondopharid dynasty?

5.Who was considered the best known Indo-Greek King.Why?

6.Who were Sakas?

7.Give an account of the religious policy of Kanishka.

IX. HOTs

1. The importance of Gandhara School of Art.
2. Provide an account of trade and commerce during the post-Mauryan period in South India.

X. Activitys

1. Prepare an album with centres of archaeological monuments of Satavahanas and Kushanas.
2. Arrange a debate in the classroom on the cultural contribution of Indo-Greeks Sakas and Kushanas.

XI. Answer Grid

Who wrote *Brihastkatha*? Ans. ____________	Name the Satavahana ruler who performed two Asvamedha sacrifices. Ans. ____________
How many years did the Satavahanas rule the Deccan? Ans. ____________	Who laid the foundation of Saka era? Ans. ____________
What was the favourite subject of the Gandhara artists? Ans. _____________	Where did Kanishka organise the fourth Buddhist Council? Ans. ______________

Unit 3

The Age of Empires: Guptas and Vardhanas

Learning Objectives

- To know the establishment of Gupta dynasty and the empire-building efforts of Gupta rulers
- To understand the polity, economy and society under Guptas
- To get familiar with the contributions of the Guptas to art, architecture, literature, education, science and technology
- To explore the signification of the reign of HarshaVardhana

Introduction

By the end of the 3rd century AD (CE), the powerful empires established by the Kushanas in the north and Satavahanas in the south had lost their greatness and strength. After the decline of Kushanas and Satavahanas, Chandragupta carved out a kingdom and establish his dynastic rule, which lasted for about two hundred years.

After the downfall of the Guptas and thereafter and interregnum of nearly 50 years, Harsha of Vardhana dynasty ruled North India from 606 to 647 A.D (CE).

Sources

Archaeological Sources

- Gold, silver and copper coins issued by Gupta rulers.
- Allahabad Pillar Inscription of Samudragupta.
- The Mehrauli Iron Pillar Inscription.
- Udayagiri Cave Inscription, Mathura Stone Inscription and Sanchi Stone Inscription of Chandragupta II.
- Bhitari Pillar Inscription of Skandagupta.
- The Gadhwa Stone Inscription.

- Madubhan Copper Plate Inscription (Punjab)
- Sonpat Copper Plate
- Nalanda Inscription on clay seal

Literary Sources

- *Vishnu, Matsya, Vayu* and *Bhagavata* Puranas and *Niti Sastras* of Narada
- Visakhadatta's *Devichandraguptam* and *Mudrarakshasa* and Bana's *Harshacharita*
- Dramas of Kalidasa
- Accounts of Chinese Buddhist monk Fahien who visited India during the reign of Chandragupta II.
- Harsha's *Ratnavali, Nagananda, Priyadharshika*
- Hiuen-Tsang's Si-Yu-Ki

Foundation of the Gupta Dynasty

Sri Gupta is considered to be the founder of the Gupta dynasty. He is believed to have reigned over parts of present-day Bengal and Bihar. He was the first Gupta ruler to be featured on coins. He was succeeded by his son Ghatotkacha. Both are mentioned as Maharajas in inscriptions.

Chandragupta I (319–335 AD(CE))

Chandragupta I married Kumaradevi of the famous and powerful Lichchhavi family. Having gained the support of this family, Chandragupta could eliminate various small states in northern India and crown himself the monarch of a larger kingdom. The gold coins attributed to Chandragupta bear the images of Chandragupta, Kumaradevi and the legend 'Lichchhavayah'.

Lichchhavi was an old gana–sanga and its territory lay between the Ganges and the Nepal Terai.

Samudragupta (335–380 AD(CE))

Samudragupta, son of Chandragupta I, was the greatest ruler of the dynasty. The Prayog Prashasti, composed by Samudragupta's court poet Harisena was engraved on Allahabad Pillar. This Allahabad Pillar inscription is the main source of information for Samudragupta's reign.

Allahabad Pillar

Prashasti

Prashasti is a Sanskrit word, meaning commendation or 'in praise of'. Court poets flattered their kings listing out their achievements. These accounts were later engraved on pillars so that the people could read them.

Consolidation of Gupta Dynasty

Samudragupta was a great general and when he became emperor, he carried on a vigorous campaign all over the country and even in the south. In the southern Pallava kingdom, the king who was defeated by Samudragupta was Vishnugopa.

Samudragupta conquered nine kingdoms in northern India. He reduced 12 rulers of the southern India to the status of feudatories and forced them to pay tribute. He received homage from the rulers of East Bengal, Assam, Nepal, the eastern part of Punjab and various tribes of Rajasthan.

> Samudragupta was a devotee of Vishnu. He revived the Vedic practice of performing horse sacrifice. Performed by kings to prove their imperial sovereignty. He issued gold coins and in one of them, he is portrayed playing harp (veenai). Samudragupta was not only a great conqueror but a lover of poetry and music and for this, he earned the title 'Kaviraja'.

> Sri Meghavarman, the Buddhist king of Ceylon, was a contemporary of Samudragupta.

Chandragupta II (380 - 415AD(CE))

Chandragupta II was the son of Samudragupta. He was also known as Vikramaditya. He conquered western Malwa and Gujarat by defeating the Saka rulers. He maintained friendly relationship with the rulers of southern India. The iron pillar near Qutub Minar is believed to have been built by Vikramaditya. Fahien, a Buddhist scholar from China, visited India during his reign. Vikramaditya is said to have assembled the greatest writers and artists (Navaratna [Nine Jewels]) in his court. Kalidasa is said to be one among them.

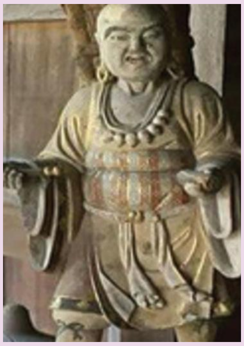
Navaratna in the court of Vikramaditya	
Kalidasa	Sanskrit poet
Harisena	Sanskrit poet
Amarasimha	Lexicographer
Dhanvantri	Physician
Kahapanaka	Astrologer
Sanku	Architect
Varahamihira	Astronomer
Varauchi	Grammarian and Sanskrit scholar
Vittalbhatta	Magician

> The surnames of Chandragupta II were Vikramaditya, Narendrachandra, Simhachandra, Narendrasimha, Vikrama Devaraja, Devagupta and Devasri.

Chandragupta II was succeeded by his son Kumaragupta I, who built the famous Nalanda University.

Kumaragupta's successor Skandagupta had to face a new threat in the form of the invasion of Huns. He defeated them and drove them away. But after twelve years, they came again and broke the back of the Gupta Empire. The last of the great Guptas was Baladitya,

Fahien



During the reign of Chandragupta II, the Buddhist monk Fahien visited India. His travel accounts provided us information about the socio-economic, religious and moral conditions of the people of the Gupta age. According to Fahien, the people of Magadha were happy and prosperous, that justice was mildly administered and there was no death penalty. Gaya was desolated. Kapilavasthu had become a jungle, but at Pataliputra people were rich and prosperous.

assumed to have been Narasimha Gupta I. He was himself attracted towards Buddhism. He was paying tribute to Mihirakula but was distressed by his hostility towards Buddhism. So he stopped paying tribute. Though Baladitya succeeded in imprisoning him, Mihirakula turned treacherous and drove away Baladitya from Magadha. After Baladitya, the great Gupta Empire faded away. The last recognised king of the Gupta Empire was Vishnugupta.

Gupta Polity

The divine theory of kingship (the concept that king is the representative of God on earth and so he is answerable only to God and not to anyone else) was practised by the Gupta rulers. The Gupta kings wielded enormous power in political, administrative, military and judicial spheres. The Gupta king was assisted by a council of *mantris* (ministers). The council consisted of princes, high officials and feudatories. A large number of officials were employed by the Gupta rulers to carry on the day-to-day administration of the country. High-ranking officials were called *dandanayakas* and *mahadandanayakas*.

The Gupta Empire was divided into provinces known as *deshas* or *bhuktis*. They were administered by the governors, designated as *uparikas*. The province was divided into districts such as *vishyas and* they were controlled by the officers known as *vishyapatis*. At the village level, there were functionaries such as *gramika* and *gramadhyaksha*.

The extensive empire shows the important role of military organisation. Seals and inscriptions mentioned military designations as *baladhikrita* and *mahabaladhikrita* (commander of infantry and cavalry respectively). The system of espionage included spies known as *dutakas*.

Society and Economy

Land and Peasants

Nitisara, authored by Kamandaka, emphasises the importance of the royal treasury and mentions various sources of revenue. The military campaigns of kings like Samudragupta were financed through revenue surpluses. Land tax was the main revenue to the government. The condition of peasants was pathetic. They were required to pay various taxes. They were reduced to the position of serfs.

Classification of land during Gupta period	
Kshetra	cultivable land
Khila	waste land
Aprahata	jungle or forest land
Vasti	habitable land
Gapata Saraha	pastoral land

Trade and Commerce

The contribution of the traders for the development of Gupta's economy was very impressive. There were two types of traders, namely *Sresti* and *Sarthavaha*.

Nalanda University

- Nalanda University flourished under the patronage of the Gupta Empire in the 5th and 6th centuries and later under emperor Harsha of Kanauj.
- At Nalanda, Buddhism was the main subject of study. Other subjects like Yoga, Vedic literature and Medicine were also taught.
- Hiuen Tsang spent many years studying Buddhism in the University.
- Eight Mahapatashalas and three large libraries were situated on the campus.
- Nalanda was ravaged and destroyed by Mamluks (Turkish Muslims) under Bhaktiyar Khalji.
- Today, it is a UNESCO World Heritage Site.

Nalanda University

Who were the Huns? Huns were the nomadic tribes, who, under their great Attila, were terrorising Rome and Constantinople. Associated with these tribes were the White Huns who came to India through Central Asia. They undertook regular invasions and were giving trouble to all Indian frontier states. After defeating Skandagupta, they spread across Central India. Their chief, Toromana, crowned himself as king. After him, his son Mihirakula ruled the captured territories. Finally, Yasodharman, ruler of Malwa in Central India, defeated them and ended their rule.

Portrayal of Toromana, the Hun chief, in coins.

Sresti	Sarthavaha
Sresti traders usually settled at a standard place.	Sarthavaha traders were caravan traders who carried their goods to different places

Trade items ranged from daily products to valuable and luxury goods. The important trade goods were pepper, gold, copper, iron, horses and elephants. Lending money at a high rate of interest was in practice during Gupta period.

The Guptas developed roadways connecting different parts of the country. Pataliputra, Ujjain, Benaras, Mathura were the famous trade centres. Ports in western (Kalyan, Mangalore, Malabar) and eastern (Tamralipti in Bengal) coasts of India facilitated trade.

Samudragupta introduced the Gupta monetary system. Kushana coins provided inspiration to Samudragupta. The Gupta gold coins were known as *Dinara*. Guptas issued many gold coins but comparatively fewer silver and copper coins. However, the post-Gupta period saw a fall in the circulation of gold coins, indicating the decline in the prosperity of the empire.

Metallurgy

- Mining and metallurgy were the most flourishing industries during the Gupta period.
- The most important evidence of development in metallurgy was the Mehrauli Iron Pillar installed by King Chandragupta in Delhi. This monolithic iron pillar has lasted through the centuries without rusting.

The metals used by them were: iron, gold, copper, tin, lead, brass, bronze, bell- metal, mica, manganese and red chalk.

Mehrauli Iron Pillar

Society

The society that adhered to four *varna* system was patriarchal. According to laws of Manu, which was in force, women should be under the protection of their father, husband or eldest son. Polygamy was widely prevalent. The kings and feudatory lords often had more than one wife. Inscriptions refer to Kubernaga and Dhrubaswamini as the queens of Chandragupta II. Sati was practised during the Gupta rule.

Slavery

Slavery was not institutionalised in India, as in the West. But there are references to the existence of various categories of slaves during the Gupta age.

Religion

There was revival of Vedic religion and Vedic rites. Samudragupta and Kumaragupta I performed *Asvamedha* Yagna (a horse sacrifice ritual). We notice the beginning of image worship and the emergence of two sects, namely Vaishnavism and Saivism, during the Gupta period. Buddhism also continued to flourish though it split into two sects, namely Hinayana and Mahayana.

Art and Architecture

The Guptas were the first to construct temples, which evolved from the earlier tradition of rock-cut shrines. Adorned with towers and elaborate carvings, these temples were dedicated to all Hindu deities.

The most notable rock-cut caves are found at Ajanta and Ellora (Maharashtra), Bagh (Madhya Pradesh) and Udaygiri (Odisha). The structural temples built during this period resemble the characteristic features of the Dravidian style.

Two remarkable examples of Gupta metal sculpture are (i) a copper image of Buddha about 18 feet high at Nalanda and (ii) Sultanganj Buddha seven-and-a-half feet in height. The most important examples of the Gupta paintings are found on the Fresco of the Ajanta caves and the Bagh cave in Gwalior.

Literature

Though the language spoken by the people was Prakrit, the Guptas made Sanskrit the official language and all their epigraphic records are in Sanskrit. The Gupta period also saw the development of Sanskrit grammar based on the grammar of Panini and Patanjali who wrote *Ashtadhyayi* and *Mahabhashya* respectively.

A Buddhist scholar from Bengal, Chandrogomia, composed a book on grammar titled *Chandravyakaranam*. Kalidasa's famous dramas were *Sakunthala*, *Malavikagnimitra* and *Vikramaoorvashiyam*. Other significant works of Kalidasa were *Meghaduta*, *Raghuvamsa, Kumarasambava* and *Ritusamhara*.

Mathematics, Astronomy and Medicine

- Invention of zero and the consequent evolution of the decimal system were the legacy of Guptas to the modern world.
- Aryabhatta, Varahamihira and Brahmagupta were foremost astronomers and mathematicians of the time. Aryabhatta, in his book *Surya Siddhanta,* explained the true causes of solar and lunar eclipses. He was the first Indian astronomer to declare that the earth revolves around its own axis.
- Dhanvantri was a famous scholar in the field of medicine. He was a specialist in Ayurveda. Charaka was a medical scientist. Susruta was the first Indian to explain the process of surgery.

Vardhana Dynasty

The founder of the Vardhana or Pushyabhuti dynasty ruled from Thaneswar. Pushyabhuti served as a military general under the Guptas and rose to power after the fall of the Guptas. With the accession of Prabakaravardhana, the Pushyabhuti family became strong and powerful.

Rajavardhana, the eldest son of Prabhakaravardhana, ascended the throne after his father's death. Rajavardhana's sister Rajayashri's husband, Raja of Kanauj, was killed by the Gauda ruler Sasanka of Bengal. Sasanka also imprisoned Rajayashri. Rajavardhana, in the process of retrieving his sister was treacherously killed by Sasanka. This resulted in his younger brother Harshavardhana becoming king

of Thaneswar. The notables of the Kanauj kingdom also invited Harsha to take its crown. After becoming the ruler of the both Thaneswar and Kanauj, Harsha shifted his capital from Thaneswar to Kanauj.

Conquest of Harshavardhana

- The most popular king of the vardhana dynasty was Harshavardhana. Harsha ruled for 41 years. His feudatories included those of Jalandhar, Kashmir, Nepal and Valabhi. Sasanka of Bengal remained hostile to him.
- It was Harsha who unified most of northern India. But the extension of his authority in the south was checked by Chalukya king Pulikesin II. The kingdom of Harsha disintegrated rapidly into small states after his death in 648 AD (CE). He maintained a cordial relationship with the rulers of Iran and China.

> Harsha met the Chinese traveller, Hiuen Tsang, at Kajangala near Rajmahal (Jharkhand) for the first time.

Administration

The emperor was assisted by a council of ministers. The prime minister occupied the most important position in the council of ministers. Bhaga, Hiranya and Bali were the three kinds of tax collected during Harsha's reign.

Criminal law was more severe than that of the Gupta age. Life imprisonment was the punishment for violation of the laws and for plotting against the king.

Perfect law and order prevailed throughout the empire. Harsha paid great attention to discipline and strength of the army. Harsha built charitable institutions for the stay of the travellers, and to care for the sick and the poor.

Coins of Harsha

Religious Policy

Harsha was the worshipper of Shiva in the beginning, but he embraced Buddhism under the influence of his sister Rajyashri and the Buddhist monk and traveller Hiuen Tsang. He belonged to Mahayana school of thought. Harsha treated Vedic scholars and Buddhist monks alike and distributed charities equally to them. He was the last Buddhist sovereign in India. As a pious Buddhist, Harsha stopped the killing of animals for food.

Hiuen Tsang, the 'prince of pilgrims', visited India during Harsha's reign. His *Si-Yu-Ki* provides detailed information about the social, economic, religious and cultural conditions of India during Harsha's time. Hiuen Tsang tells us how Harsha, though a Buddhist, went to participate in the great *kumbhamela* held at Prayag.

Hiuen Tsang

He was noted for his policy of religious toleration and used to worship the images of Buddha, Shiva and Sun simultaneously. He summoned two Buddhist assemblies, one at Kanauj and another at Prayag.

The assembly at Kanauj was attended by 20 kings. A large number of Buddhist, Jain and Vedic scholars attended the assembly. A golden statue of Buddha was consecrated in a monastery and a small statue of Buddha (three feet) was carried in a procession.

In the assembly at Prayag, Harsha distributed his wealth among the Buddhists, Vedic scholars and poor people. Harsha offered fabulous gifts to the Buddhist monks on all the four days of the assembly.

Art and Literature

Harsha, himself a poet and dramatist, gathered around him a best of poets and artists. Harsha's popular works are *Ratnavali*, *Nagananda* and *Priyadharshika.* His royal court was adorned by Banabhatta, Mayura, Hardatta and Jayasena.

Temples and monasteries functioned as centres of learning. Kanauj became a famous city. Harsha constructed a large number of viharas, monasteries and stupas on the bank of the Ganges. The Nalanda University, a university and monastery combined, was said to have had 10,000 students and monks in residence, when Hiuen Tsang visited the university.

Elsewhere

Chandragupta I was the contemporary of Constantine the Great, the Roman Emperor, who founded Constantinople.

Harsha's time coincided with a early days of Tang Dynasty of China. Their capital(Xi'an) was a great centre of art and learning.

Constantine the Great

King of Tang Dynasty

Summary

- Sri Gupta was the founder of Gupta dynasty
- Chandragupta I, Samudragupta and Chandragupta II were the great kings of Gupta dynasty
- Vishnugupta was the last recognised king of Gupta Empire
- Divine Right Theory of kingship was practised by the Gupta rulers
- Mining and metallurgy were the most flourishing industries during the Gupta Period
- The society that adhered to four varna system was patriarchal
- There was a revival of Vedic religion and Vedic rites
- The Guptas were the first to construct temples which evolved from the earlier tradition of rock-cut shrines
- Aryabhatta, Varahamihira and Brahmagupta were foremost astronomers and mathematicians of the time
- Harsha was a prominent ruler of Vardhana dynasty and was elevated to the position of an emperor
- Harsha was a great artist and dramatist and contributed to the development of literature and art
- Hiuen Tsang visited Nalanda and wrote his useful travel accounts, which help us understand the condition of India during Harsha's reign
- Harsha, though a strong follower of Buddhism, also promoted Vedic religion

GLOSSARY

Engraved	carved/inscribed	பொறிக்கப்பட்ட (செதுக்கிய)
Flattered	lavish insincere praise and compliments upon (someone) especially to further one's own interest	முகஸ்துதி
Collapse	fall	சரிவு
Pathetic	pitiful	பரிதாபகரமான
adhered to	abide by, bound by	பின்பற்றப்பட்ட
pastoral land	land or farm used for grazing cattle	மேய்ச்சல் நிலம்
Portrayed	depicted in a work of art or literature	சித்தரிக்கப்பட்டுள்ளது
Desolated	made unfit for habitation	பாழடைந்த

Exercise

I. Choose the correct answer

1. __________ was the founder of Gupta dynasty.
   a) Chandragupta I   b) Sri Gupta
   c) Vishnu Gopa   d) Vishnugupta

2. Prayog Prashasti was composed by __________
   a) Kalidasa   b) Amarasimha
   c) Harisena   d) Dhanvantri

3. The monolithic iron pillar of Chandragupta is at __________
   a) Mehrauli   b) Bhitari
   c) Gadhva   d) Mathura

4. __________ was the first Indian to explain the process of surgery.
   a) Charaka   b) Sushruta
   c) Dhanvantri   d) Agnivasa

5. __________ was the Gauda ruler of Bengal.
   a) Sasanka   b) Maitraka
   c) Rajavardhana   d) Pulikesin II

II. Match the statement with the reason and tick the appropriate answer

1. **Assertion (A):** Chandragupta I crowned himself as a monarch of a large kingdom after eliminating various small states in Northern India.

   Reason (R): Chandragupta I married Kumaradevi of Lichchavi family.

   a) Both A and R are true and R is the correct explanation of A.
   b) Both A and R are correct but R is not correct explanation of A.
   c) A is correct but R is not correct.
   d) A is not correct but R is correct.

2. **Statement I:** Chandragupta II did not have cordial relationship with the rulers of South India.

   Statement II: The divine theory of kingship was practised by the Gupta rulers.

   a) Statement I is wrong but statement II is correct.

   b) Statement II is wrong but statement I is correct.

   c) Both the statements are correct.

   d) Both the statements are wrong.

3. Which of the following is arranged in chronological order?

   a) Srigupta – Chandragupta I – Samudragupta – Vikramaditya

   b) Chandragupta I – Vikramaditya - Srigupta – Samudragupta

   c) Srigupta – Samudragupta – Vikramaditya -Chandragupta I

   d) Vikramaditya - Srigupta – Samudragupta - Chandragupta I

4. Consider the following statements and find out which of the following statement(s) is / are correct

   1.Lending money at high rate of interest was practised.

   2.Pottery and mining were the most flourishing industries.

   a) 1. is correct   b) 2. is correct

   c) Both 1 and 2 are correct   d) Both 1 and 2 are wrong

5.Circle the odd one

1.Kalidasa, Harisena, Samudragupta, Charaka.

2.Ratnavali, Harshacharita, Nagananda, Priyadharshika.

III. Fill in the blanks

1. ___________, the king of Ceylon, was a contemporary of Samudragupta.
2. Buddhist monk from China ___________, visited India during the reign of Chandragupta II.
3. ___________ invasion led to the downfall of Gupta Empire.
4. ___________ was the main revenue to the Government.
5. The official language of the Guptas was ______________.
6. ___________, the Pallava king was defeated by Samudragupta.
7. ___________ was the popular king of Vardhana dynasty.
8. Harsha shifted his capital from ____________ to Kanauj.

IV. State whether True or False

1. Dhanvantri was a famous scholar in the field of medicine.
2. The structural temples built during the Gupta period resemble the Indo-Aryan style.

3. Sati was not in practice in the Gupta Empire.

4. Harsha belonged to Hinayana school of thought.

5. Harsha was noted for his religious intolerance.

V. Match the following

A

a. Mihirakula	1 Astronomy
b. Aryabhatta	2 Kumaragupta
c. Painting	3 Skandagupta
d. Nalanda University	4 Caravan trader
e. Sartavaga	5 Bagh

a) 1, 2, 4, 3, 5 b) 2, 4, 1, 3, 5 c) 3, 1, 5, 2, 4 d) 3, 2, 1, 4, 5

B

a. Bana	1 10,000 students
b. Harsha	2 Prayag
c. Nalanda University	3 Harshacharita
d. Hiuen -Tsang	4 Ratnavali
e. Buddhist Assembly	5 Si-Yu-Ki

a) 4, 3, 2, 1, 5 b) 5, 2, 1, 3, 4 c) 3, 5, 1, 2, 4 d) 2, 1, 3, 4, 5

VI. Answer in one or two sentences

1. Who was given the title Kaviraja? Why?
2. What were the subjects taught at Nalanda University?
3. Explain the Divine Theory of Kingship.
4. Highlight the achievement of Guptas in metallurgy.
5. Who were the Huns?
6. Name the three kinds of tax collected during the Harsha's reign.
7. Name the books authored by Harsha.

VII. Answer the following briefly

1. Write a note on Prashasti.
2. Give an account of Samudragupta's military conquests.
3. Describe the land classification during the Gupta period.
4. Write about Sresti and Sarthavaha traders.
5. Highlight the contribution of Guptas to architecture.
6. Name the works of Kalidasa.
7. Estimate Harshvardhana as a poet and a dramatist.

VIII. HOTs

1. The gold coins issued by Gupta kings indicate__________.
   a) the availability of gold mines in the kingdom
   b) the ability of the people to work with gold
   c) the prosperity of the kingdom
   d) the extravagant nature of kings
2. The famous ancient paintings at Ajanta were painted on __________.
   a) walls of caves   b) ceilings of temples
   c) rocks   d) papyrus
3. Gupta period is remembered for __________.
   a) renaissance in literature and art   b) expeditions to southern India
   c) invasion of Huns   d) religious tolerance
4. What did Indian scientists achieve in astronomy and mathematics during the Gupta period?

IX. Student activity

1. Stage any one of the dramas of Kalidasa in the classroom.
2. Compare and contrast the society of Guptas with that of Mauryas.

X.Life Skills

1. Collect information about the contribution of Aryabhatta, Varahamihira and Brahmagupta to astronomy.
2. Visit a nearby ISRO centre to know more about satellite launching.

XI. Answer Grid

Who was Toromana? Ans.	Name the high ranking officials of Gupta Empire. Ans.
Name the Gupta kings who performed Asvamedha yagna. Ans.	Name the book which explained the causes for the lunar and solar eclipses. Ans.
Name the first Gupta king to find a place on coins. Ans.	Which was the main source of information to know about the Samudragupta's reign? Ans.
Harsha was the worshipper of ____________ in the beginning.	__________ University reached its fame during Harsha period.

ICT CORNER

THE AGE OF EMPIRES: GUPTAS AND VARDHANAS

This activity is to explore Maps. You can know about countries, capitals, flags and cities in all the continents using an Educational Interactive game **Settera Map Quiz**.

Steps:

Step 1: Open the Browser and type the given URL (or) Scan the QR Code.

Step 2: Free map Quiz page will appear on the screen.

Step 3: Scroll down and You can select any continent or Country (ex. India Cities)

Step 4: Explore various places on the map, play and create customized quiz activities.

Step 1

Step 2

Step 3

Step 4

Browse in the link

Web: https://online.seterra.com/en/ (or) scan the QR Code

Mobile: https://play.google.com/store/apps/details?id=com.seterra.free

*Pictures are indicatives only.

Unit 4

South Indian Kingdoms

Learning Objectives

- To know the southern Indian states that emerged after the fall of the Mauryan Empire
- To acquire information of the ruling dynasties such as Pallavas, Chalukyas and Rashtrakutas and their domains
- To understand their contribution to society and culture with reference to literature, art and architecture
- To become familiar with the artistic and architectural splendour of Mamallapuram shore temple, Ellora monuments and Elephanta cave temples

South Indian Kingdoms

By the early 7th century, synchronising with the Harsha's reign in the north, the far south had come under the control of the Pallava kings of Kanchipuram. Pallava sovereignty included the domains of the Cholas and the Pandyas. The latter were then emerging as ruling dynasties in their respective river valley regions. Much of the central and eastern Deccan was under the Chalukyas of Badami (Vatapi), who were then pushed away by the Rashtrakutas. The medieval period in India was marked by thee mergence of regional centres of power. There was no single imperial power like Mauryas or Guptas who exercised control over the greater part of India in this period.

The Pallavas

The Pallava kings ruled around the prosperous agrarian settlement and important trade centre of Kanchipuram on the southeast coast of India. Kanchipuram was well known to Chinese and Roman merchants. From the flourishing trade centre of Kanchipuram, the later Pallavas extended their sovereignty over all the Tamil-speaking regions during the 7th and 8th centuries. The central part of their kingdom, however, was Thondaimandalam, a large political region comprising northern parts of Tamil Nadu and the adjoining Andhra districts.

Sources

Inscriptions	Mandagapattu Cave, Aihole Inscription of Pulakesin II
Copper Plates	Kasakudi Plates
Literature	*Mattavilasa Prahasana, Avanthi Sundarakatha, Kalingathu Parani, Periya Puranam, Nandi Kalambagam*
Foreign Notice	Accounts of Chinese traveller Hiuen Tsang

Pallava Genealogy (Prominent Kings)

There were early Pallava rulers who were feudatories of Satavahanas. Simhavishnu, son of Simhavarman II (around 550 AD (CE), created a strong Pallava kingdom after destroying the Kalabhras. He defeated many kings in the south including the Cholas and the Pandyas. His able son was Mahendravarman I. He was succeeded by his son Narasimhavarman I. The other prominent Pallava rulers were Narasimhavarman II or Rajasimha and Nandivarman II. The last Pallava ruler was Aparajita.

Mahendravarman (*c.*600–630AD (CE)) contributed to the greatness of the Pallava kingdom. Mahendravarman I was a follower of Jainism in the early part of his rule. He embraced Saivism by the Saivite saint Appar (Tirunavukkarasar). He was a great patron of art and architecture. He is known for introducing a new style to Dravidian architecture, which is referred to as 'Mahendra style'. Mahendravarman also wrote plays, including (*c.*620) *MattavilasaPrahasana* in Sanskrit, which denigrates Buddhism.

Mahendravarman's reign involved constant battles with the Western Chalukya kingdom of Badami under Pulakesin II. Pulakesin seems to have defeated Mahendravarman in one of the battles and taken over a large part of his territory (Vengi) in the north. His son Narasimavarma I (c. 630–668) avenged the defeat by capturing Vatapi, the capital of Chalukyas. He set Vatapi on fire, killing Pulakesin in the process.

> Narasimhavarman I's army general was Paranjothi. Popularly known as Siruthondar (one of the 63 Nayanmars), Paranjothi led the Pallava army during the invasion of Vatapi. After the victory he had a change of heart and devoted himself to Lord Siva
>
> *–Periya Puranam*

Narasimhavarman II (c. 695–722), also known as Rajasimha, was a great military strategist. He exchanged ambassadors with China. His reign was comparatively free from any political disturbance. Therefore, he could concentrate on temple-building activities. During his reign, the famous Kailasanatha temple at Kanchipuram was built.

Name of the King	Title/s Adopted
Simhavishnu	Avanisimha
Mahendravarma I	Sankirnajati Mattavilasa Gunabhara Chitrakarapuli Vichitra Chitta
Narasimhavarma I	Mamallan, Vatapi Kondan

Pallava's Contribution to Architecture

Pallava period is known for architectural splendour. The Shore Temple and various other temples carved from granite monoliths and the Varaha cave (7th century) at Mamallapuram, are illustrious examples of Pallava architecture. In 1984, Mamallapuram was added to the list of UNESCO World Heritage Sites.

Pallava architecture can be classified as

1. Rock-Cut temples – Mahendravarman style
2. Monolithic Rathas and Sculptural Mandapas – Mamallan style
3. Structural Temples – Rajasimhan style and Nandivarman style

Mahendra Style

The best example of MahendraVarma style monuments are cave temples at Mandagapattu, Mahendravadi, Mamandur, Dalavanur, Tiruchirapalli, Vallam, Tirukazhukkundram and Siyamangalam.

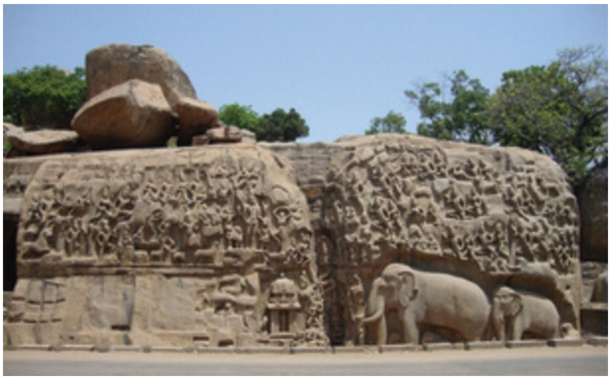
Cave Temple Mandagapattu

Mamalla Style

The five *rathas* (chariots), popularly called Panchapandavar rathas, signify five different style of temple architecture. Each ratha has been carved out of a single rock. So they are called monolithic. The popular mandapams (pillared pavilions) they built are Mahishasuramardhini mandapam, Thirumoorthi mandapam and Varaha mandapam.

Panchapandavar Rathas

The most important among the Mamalla style of architecture is the open art gallery. Several miniature sculptures such as the figure of lice-picking monkey, elephants of huge size and the figure of the ascetic cat have been sculpted beautifully on the wall of a huge rock. The fall of the River Ganga from the head of Lord Siva and the Arjuna's penance are notable among them. The Great Penance panel is considered to be the world's largest open-air bas relief.



Arjuna's Penance

Rajasimha Style

Narasimhavarma II, also known as Rajasimha, constructed structural temples using stone blocks.The best example for the structural temple is Kailasanatha temple at Kanchipuram. This temple was built by using sand stones. Kailasanatha temple is called Rajasimheswaram.

Kanchi Kailasanatha Temple

Nandivarma Style

The last stage of the Pallava architecture is also represented by structural temples built by the later Pallavas. The best example is Vaikunda Perumal temple at Kanchipuram.

Kanchi Vaikunda Perumal Temple

Society and Culture

The Pallavas supported Jainism, Buddhism and the Vedic faith. They were great patrons of music, painting and literature. Some of the Pallava kings patronised the Azhwars and Nayanmars. These exponents of Bhakti Cult preached a new form of Vaishnavism and Saivism. Among the Saivites were Appar and Manikkavasakar. Among the Vaishnavites were Nammazhvar and Andal. The Bhakti movement aimed at preaching a popular faith, in which prayers in Tamil were preferred to those in Sanskrit. Women were encouraged to participate in the religious congregations. The Tamil devotional cult was competitive with Buddhism and Jainism. Therefore the latter suffered a gradual decline in most parts of Tamil country.

Education and Literature

- Gatika (monastery or centre of learning) at Kanchi was popular during the Pallava times and it attracted students from all parts of India and abroad.Vatsyaya who wrote *Nyaya Bhashya* was a teacher at Kanchi (Gatika).
- The treatise on *Dakshin Chitram* (Paintings of South India) was compiled during the reign of Mahendravarma I.
- The great Sanskrit scholar, Dandin, adorned in the court of Narasimhavarma I. Dandin composed *Dashakumara Charita.*
- Bharavi, the great Sanskrit scholar, lived in the time of Simhavishnu. Bharavi wrote *Kiratarjuniya,* an epic in verses.
- Tamil literature had also flourished during the Pallava rule. *Thevaram* composed by Nayanmars and *Nalayradivyaprabantham* composed by Azhwars, which are still chanted by devout people. Perundevanar, who was patronized by Nandivarman II, translated the *Mahabharata* into Tamil as *Bharathavenba.*

Pallava Art

The Pallava kings had also patronised fine arts. The music inscriptions in Kudumianmalai and Thirumayam temples show Pallavas' interest in music. The famous musician Rudracharya lived during Mahendravarma I. The sculptures of this period depict many images in dancing postures.

The Chalukyas

The Chalukyas ruled larger parts of west and centre of South India, consisting of Maratha country with Vatapi (Badami)

as their capital. There were three distinct but closely related and independent Chalukya dynasties. They were

1. Chalukyas of Badami
2. Chalukyas of Vengi (Eastern Chalukyas)
3. Chalukyas of Kalyani (Western Chalukyas).

These Chalukyas held Harsha in the north, the Pallavas in the south and Kalinga (Odisha) in the east.

Sources

Inscriptions	Badami Cave Inscription of Mangalesha Kanchi Kailasanatha Temple Inscription Pattadakal Virupaksha Temple Inscription Aihole Inscription of Pulakesin II
Foreign Notice	Accounts of Chinese traveller Hiuen Tsang

Aihole Inscription: It is found at Meguti Temple in Aihole (Bagalkot district, Karnataka). It is written in Sanskrit by Ravikirti, a court poet of Chalukya king Pulakesin II. It makes a mention of the defeat of Harsha Vardhana by Pulakesin II.

The Chalukyas of Vatapi

Pulakesin I, a petty chieftain of Pattadakal in the Bijapur district, took and fortified the hill fort of Vatapi around 543 AD (CE). He soon conquered the territory between the Krishna and Tungabhadra rivers and the Western Ghats. His son Kirtivarman I (c. 566 to 597) brought the Konkan coast under Chalukya control. Pulakesin II (*c.*610 to 642) emerged as the most powerful ruler of the dynasty. The Persian (Iran) king Khusru II sent an embassy to the court of Pulakesin II. Pulakesin succeeded in seizing parts of Gujarat and Malwa. He defied the North Indian ruler Harsha and according to an agreed understanding Narmada river was fixed as the boundary between the two. About 624, Pulakesin II conquered the kingdom of Vengi and gave it to his brother Vishnuvardhana, the first Eastern Chalukya ruler.

During 641–647 the Pallavas ravaged the Deccan and captured Vatapi, but the Chalukyas had recaptured it by 655. Vikramaditya I (655 to 680) and Vikramaditya II, the successor of Vikramaditya I captured Kanchipuram but spared the city. Kirtivarman II, the successor of Vikramaditya II was defeated by Dantidurga, the founder of the Rashtrakuta dynasty.

Western Chalukyas of Kalyani

They were the descendants of Badami Chalukyas ruled from Kalyani (modern-day Basavakalyan). In 973, Tailapa II, a feudatory of the Rashtrakuta ruling

from Bijapur region defeated Parmara of Malwa. Tailapa II occupied Kalyani and his dynasty quickly grew into an empire under Somesvara I. Somesvara I moved the capital from Manyakheta to Kalyani.

For over a century, the two empires of southern India, the Western Chalukyas and the Chola dynasty of Thanjavur, fought many fierce battles to control the fertile region of Vengi. During the rule of Vikramaditya VI in the late 11th century, vast areas between the Narmada River in the north and Kaveri River in the south came under Chalukya control.

Contributions to Art and Architecture

As supporters of both Saivism and Vaishnavism, the Chalukyas contributed richly to art and architecture. A new style of architecture known as Vesara was developed. Vesara is a combination of south Indian (Dravida) and north Indian (Nagara) building styles. They perfected the art of stone building without mortar. They used soft sandstones in construction.

They built a number of rock-cut cave-temples and structural temples dedicated to Siva, Vishnu and Brahma. The structural temples of Chalukyas exist at Aihole, Badami and Pattadakal. The important stone temples are the Vishnu temples at Badami and Aihole and the Virupaksha or Siva Temple at Pattadakal in Bijapur district in present-day Karnataka. The Vishnu temple at Badami was built

Cave Temple Badami

Kalleshwara Temple - Bagali

by Mangalesa of the Chalukya Dynasty and contains the Aihole inscription of Vikramaditya II. Their cave temples are found at Ajanta, Ellora and Nasik.

The cave temples at Badami contain fine sculptures of Vishnu reclining on Sesha Nag; Varaha, the Boar; Narasimha or the lion-faced man; and Vamana, the dwarf. The Kasi Vishweshvara Temple at Lakkundi,

the Mallikarjuna Temple at Kuruvatti, the Kalleshwara Temple at Bagali and the Mahadeva Temple at Itagi represent well-known examples of the architecture of Western Chalukyas of Kalyani.

Chalukyas adopted the Vakataka style in paintings. Some of the frescoes of the caves of Ajantha were created during the reign of Chalukyas. The reception given to the Persian embassy by Pulakesin II is depicted in a painting at Ajanta.

Pattadakal (UNESCO World Heritage Site) is a small village in Bagalkot district of Karnataka. It has ten temples. Out of them, four were built in northern style (Nagara), while the rest six are in the southern (Dravida) style. Virupaksha Temple and Sangameshwara Temple are in Dravida Style and Papanatha temple is in Nagara style. The Virupaksha temple is built on the model of Kanchi Kailasanatha temple. Sculptors brought from Kanchi were employed in its construction.

The Rashtrakutas

The Rashtrakutas ruled not only the Deccan but parts of the far south and the Ganges plain as well from 8th to 10th century AD(CE). They were of Kannada origin and their mother tongue was Kannada. Dantidurga was the founder of Rashtrakuta dynasty. He was an official of high rank under the Chalukyas of Badami. Krishna I succeeded Dantidurga. He consolidated and extended the Rashtrakuta power. He was a great patron of art and architecture. The Kailasanatha temple at Ellora was built by him.

Rashtrakuta Kings

The greatest king of the Rashtrakuta dynasty was Amogavarsha. He built a new capital at Manyakheta (now Malkhed in Karnataka) and Broach became the port. Amogavarsha (c. 814–878) was embraced to Jainism by Jinasena, a Jain monk. Krishna II, who succeeded his father Amogavarsha, suffered a defeat in the battle of Vallala (modern Tiruvallam, Vellore district) at the hands of Cholas under Parantaka in c. 916. Krishna III (c. 939–967) was the last able ruler of Rashtrakuta dynasty. He defeated the Cholas in the battle of Takkolam (presently in Vellore district) and captured Thanjavur. The Chalukyas under Krishna III contested with other ruling dynasties of north India for the control of Kanauj. He built Krishneshwara temple at Rameshwaram.Govinda III was the last ruler to hold the empire intact. After his death, the Rashtrakuta power declined.

Contribution of Rashtrakutas to literature, art and architecture

Literature

Kannada language became more prominent. *Kavirajamarga* composed by Amogavarsha was the first poetic work in

Kannada language. Court poets produced eminent works in Kannada. The three gems of Kannada literature during the period were Pampa, Sri Ponna and Ranna. Adikavi Pampa was famous for his creative works *Adipurana* and *Vikramarjunavijaya.* The life of Rishabadeva, the first Jain Tirthankara is depicted in *Adipurana.* In *Vikramarjunavijaya* Pampa's patron, Chalukya Arikesari, is identified with Arjuna, epic hero of Mahabharatha.

Art and architecture

The Rashtrakutas made significant contribution to Indian Art. The art and architecture of the Rashtrakutas can be found at Ellora and Elephanta.

Kailasanatha Temple – Ellora (near Aurangabad, Maharashtra)

Kailasanatha Temple was one of the 30 temples carved out of the hill at Ellora. It was built during the reign of Krishna I. The temple is known for its architectural grandeur and sculptural splendour. The temple covers an area of over 60,000 sq. feet and *vimanam* (temple tower) rises to a height of 90 feet. This temple has resemblance to the shore temple at Mamallapuram. The Kailasanatha temple portrays typical Dravidian features.

Kailasanatha Temple – Ellora

Elephanta Island

Originally known as Sripuri and called Gharapuri by the local people, Elephanta is an island near Mumbai. The Portuguese named it as Elephanta, after seeing the huge image of an elephant. The Trimurthi (three-faced) Siva icon is an illustrative of the sculptural beauty portrayed in the Cave Temple of Elephanta. There are impressive images of *dwarapalakas* (entrance guards) at the entrance of the Temple.

Elephanta Cave

Pattadakal

Rashtrakutas built temples in the complex of Pattadakal. The Jain Narayana temple and the Kasi Vishwesvara temple were built by Rashtrakutas.

Jain Narayana Temple

Elsewhere

Leshan Giant Buddha
(71 metre tall)
Built during Tang dynasty in China,
(713 and 803 AD (CE)).

Baghdad
The greatest city of Islamic Empire
of 8th to 10th centuries AD (CE).

Summary

- By the early 7th century, South India had come under the control of Pallavas of Kanchi and Chalukyas of Badami
- Pallava period is known for architectural splendour. Pallava architecture can be classified as rock-cut temples, structural temples. monolithic *rathas* and *mandapam*s
- The Chalukyas contributed richly to art and architecture. A new style of architecture known as Vesara style developed during their period
- The Rashtrakutas also made significant contribution to Indian art. Their art and architecture can be found at Ellora cave and Elephanta island

GLOSSARY

feudatories	being subject to a sovereign	சிற்றரசர்கள்
ambassador	envoy	தூதுவர்
granite	a very hard rock	கருங்கல்
ravaged	severely damaged	சூறையாடிய
descendants	offspring	வழித்தோன்றல்கள்
reclining	leaning back	சாய்ந்திருக்கக்கூடிய

Exercise

I. Choose the correct answer

1. Who among the following built the VaikundaPerumal temple?
   a) Narasimhavarma II b) Nandivarma II
   c) Dantivarman d) Parameshvaravarma

2. Which of the following titles were the titles of Mahendra Varma I?
   a) Mattavilasa b) Vichitra Chitta
   c) Gunabara d) all the three
3. Which of the following inscriptions describes the victories of Pulakesin II?
   a) Aihole b) Saranath c) Sanchi d) Junagath

II. Read the statement and tick the appropriate answer

1. **Statement I:** Pallava art shows transition from rock-cut monolithic structure to stone built temple.
   Statement II: Kailasanatha temple at Kanchipuram is an example of Pallava art and architecture.
   a) Statement I is wrong.
   b) Statement II is wrong.
   c) Both the statements are correct
   d) Both the statements are wrong.

2. Consider the following statement(s) about Pallava Kingdom.
   Statement I: Tamil literature flourished under Pallava rule, with the rise in popularity of Thevaram composed by Appar.
   Statement II: Pallava King Mahendravarman was the author of the play Mattavilasa Prahasana.
   a) I only b) II only
   c) Both I and II d) Neither I nor II

3. Consider the following statements about the Rashtrakuta dynasty and find out which of the following statements are correct.
   1. It was founded by Dantidurga.
   2. Amogavarsha wrote Kavirajmarga.
   3. Krishna I built the Kailasanatha temple at Ellora.
   a) 1only b) 2 and 3
   c) 1 and 3 d) all the three

4. Which of the following is not a correct pair?
   a) Ellora caves - Rashtrakutas
   b) Mamallapuram - Narasimhavarma I
   c) Elephanta caves - Ashoka
   d) Pattadakal - Chalukyas
5. Find out the wrong pair.
   a) Dandin - Dasakumara Charitam
   b) Vatsyaya - Bharathavenba
   c) Bharavi - Kiratarjuneeyam
   d) Amogavarsha - Kavirajamarga

III. Fill in the blanks

1. _____________defeated Harsha Vardhana on the banks of the river Narmada.
2. _____________destroyed Vatapi and assumed the title VatapiKondan.
3. _____________was the author of Aihole Inscription.
4. _____________was the army general of Narasimhavarma I
5. The music inscriptions in ____________and ____________show Pallavas' interest in music.

IV. Match the following.

1.	Pallavas	-	Kalyani
2.	Eastern Chalukyas	-	Manyakheta
3.	Western Chalukyas	-	Kanchi
4.	Rashtrakutas	-	Vengi

V. State True or False

1. The famous musician Rudracharya lived during Mahendravarma I.
2. The greatest king of the Rashtrakuta dynasty was Pulakesin II.
3. Mamallapuram is one of the UNESCO World Heritage Sites.
4. Thevaram was composed by Azhwars.
5. The Virupaksha temple was built on the model of Kanchi Kailasanatha Temple.

VI. Answer in one or two sentences

1. Name the three gems of Kannada literature.
2. How can we classify the Pallava architecture?
3. What do you know of Gatika?
4. Panchapandavar rathas are monolithic rathas. Explain.
5. Make a note on Battle of Takkolam.

VII. Answer the following

1. Examine Pallavas' contributions to architecture.
2. Write a note on Elephanta island and Kailasanatha temple at Ellora.

VIII. HOTs

1. Give an account on Western Chalukyas of Kalyani.

IX. Life Skills

1 Collect temple architecture pictures of Pallavas, Chalukyas and Rashtrakutas and identify the distinguishing features of each period.

2. Field Trip:

   Plan a trip to any place of historical importance.

X. Activitys

1. Sketch the biography of Mahendravarma I and Pulakesin II.
2. See the picture and write a few sentences on it.

XI. Answer Grid

Give examples for the structural temples of Pallava period. Ans:	Name the new style of architecture developed during Chalukya period. Ans:	What does Aihole inscription mention? Ans:
Who built the Kailasanatha temple at Ellora? Ans:	Name the sculptural mandapas of Mamallan style of architecture. Ans:	Where do structural temples of Chalukya exist? Ans:
Name two Saivite saints and Vaishnavite saints who practised *bhakti*cult during Pallava period? Ans:	Who was the founder of Rashtrakuta dynasty? Ans:	What were the titles adopted by Narasimhavarma I? Ans:

ICT CORNER

South Indian Kingdoms

This activity for Interactivity Map is a UNESCO World Heritage Sites helps to know learn about ancient **Heritage Sites**

Steps:

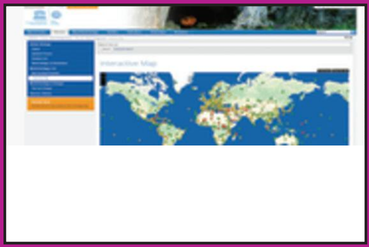
Step 1: Open the Browser and type the URL given below (or) Scan the QR Code.

Step 2: World Heritage Centre page will appear on the screen.

Step 3: Double click or Zoom any tagged sites or places. (ex. Mamallapuram)

Step 4: You can see collective pictures, videos and more details.

Step 1



Step 2

Step 3

Step 4

Browse in the link

Web: http://www.elections.in/ (or) scan the QR Code

*Pictures are indicatives only.

GEOGRAPHY

Unit **1**

Asia and Europe

Learning Objectives

- To understand the location, extent and political divisions of the continents of Asia and Europe
- To know about the physical features and drainage of these two continents.
- To understand the climate and natural vegetation of these continents.
- To discuss the economic activities and resources.
- To appraise the cultural mosaic of both the continents.
- To gain the skill of locating the given places on the map.

Students: Good morning, Teacher.

Teacher: Good morning, students! Did you celebrate the English New Year well?

Students: Yes madam.

Teacher: Ok. English is the native of which country?

Students: Britain.

Teacher: Good. Do you know which continent is it located in?

Students: Europe.

Teacher: Very good. Which is our home continent?

Students: Asia.

Teacher: Exactly. In the first term, you have learnt about how many continents are in the world and their names. In this lesson, we are going to learn in detail about Asia and Europe. Let us explore these two continents.

This lesson disscusses about the location, boundaries, physical and political divisions of Asia and Europe. The major rivers, climate and natural vegetation are highlighted in this lesson. It also explains about how economic activities are determined by the resources.

The cultural mosaics of Asia and Europe are great eye openers for learners in terms of European and Asian cultures.

PART A. ASIA

Asia is the largest and the most populous continent in the world. It covers about 30 percent of the world's land area and about 60 percent of the world's population. Most of the land of Asia lies in the northern hemisphere. It has different types of physical and cultural features. Lofty mountains, plateaus, plains, islands and peninsulas are the major physiographic features of Asia. Many perennial rivers flow through different parts of Asia. These river valleys are the cradles of ancient civilizations (Indus valley, Mesopotamian and Chinese civilizations). Let us know more about our home continent.

Location and Area

Asia extends from 10°11' South to 81°12' North latitudes and from 26°2' East to 169°40' West, longitudes. It spreads for an area of 44 million km^2.

Boundaries

Asia is surrounded by the Arctic Ocean in the north, Pacific Ocean in the east, Indian Ocean in the south and the Ural Mountains, Caucasus Mountains, Red Sea, Mediterranean Sea, Caspian Sea and Black Sea in the west.

The Suez Canal separates Asia from Africa. The narrow Bering Strait separates Asia from North America.

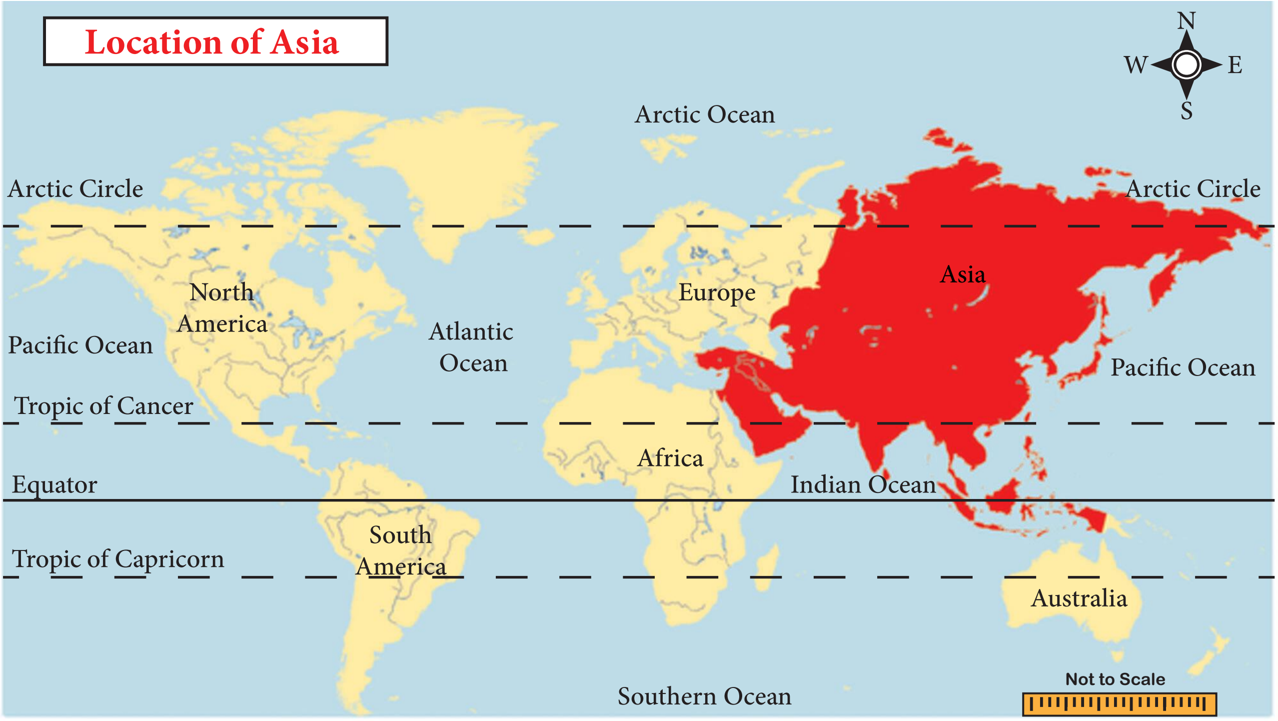
Political Divisions

There are forty eight countries in Asia. The countries are grouped into several realms based on landscape and political status such as

1.East Asia 2.Southeast Asia 3.South Asia 4.Southwest and 5.Central Asia

Physiographic Divisions

Asia is the land of long mountain ranges, snow capped high mountains, vast plateaus, extensive plains, river valleys and sea coasts. These diverse physical features encourage the people of this continent to



ASIA - POLITICAL

Fact :

There are 12 landlocked countries in Asia. Among these, only one is doubly landlocked which means it is surrounded entirely by other landlocked countries. Find out the doubly landlocked country.

involve in diverse economic activities. The physiography of Asia can be divided into five major groups. They are;

1. **The Northern lowlands**
2. **The Central High Mountains**
3. **The Southern Plateaus**
4. **The Great Plains and**
5. **The Island Groups**

1. The Northern Lowlands

The most extensive lowland in Asia is the **Siberian plain**. It extends from the Ural Mountains in the west to the Verkhoyansk Range in the east.

2. The Central Highlands

The central highlands stretches from Turkey to the Bering Strait. There are two knots found in Asia. They are **1. The Pamir Knot 2.The Armenian Knot.**

DO YOU KNOW?

'Knot' refers to the convergence of mountain ranges

The Hindukush range, the Sulaiman range, the Himalayan range and **the Tian Shan range** radiate from the Pamir

Mountain Ranges radiate from the Pamir and the Armenian Knot

Knot. The Hindukush range continues westward as the **Elburz,** whereas the **Sulaiman** range continues south west as the **Zagros** range. The Elburz and the **Zagros** converge at the Armenian knot. The **Taurus** and the **Pontine** ranges radiate from the Armenian knot. The other important mountain ranges are the great **Khingan**, the **Altai**, the **Verkoyansk** and the **Arakan yoma**.

The Himalayan mountain range is the highest mountain range in the world. Mt. Everest (8848 m) is not only the highest peak in Asia but also in the world.

The lowest point in the world is located in **Dead Sea** in Asia.

Intermontane plateaus are found in these mountain ranges. The important plateaus are

1. The **plateau of Anatolia** (Pontine to Taurus)
2. The **plateau of Iran** (Elburz to Zagros mt)
3. The **plateau of Tibet** (Kunlun to Himalayas)

DO YOU KNOW?

Tibet is called the **'Roof of the world'** and it is also known as the **third pole** because of its cold weather, largest reserve of freshwater and inhospitable environment.

HOTS :

The Khyber Pass is located in the Sulaiman range, the Bolan Pass is located in Toba Kakar range. What is the importance of these two passes?

Asia Physical
Arctic Ocean
N
W
E
S
Europe
Ural Mountain
West
Siberian
plains
Yenisey River
Ob River
Central
Siberian
plateau
Lena River
Verkhoyansk Range
Amur River
Bearings Strait
Bearing Sea
Sea of
Okhotsk
Sakhalin Island
Kuril Island
Baykal Lake
Great khingan Mts
Mongalian
Plateau
Altai Mts.
Gobi Desert
Manchurian
Plain
Sea of
Japan
Japanese Islands
Pacific Ocean
Ural River
Caspian Sea
Black Sea
Aral
Sea
Syr-Darya
Amu-Darya
Balkhash
Lake
Tien Shan
Takli makan Dt.
Desert.
Kunlun shan Mts.
Pamirs
Hindu kush
Anatolia
Plateau
Pontine
Armenian Knot
Taurus
Mesopotamia
Tigris
Euphrates
Elburz
Mediterranean
Sea
Dead Sea
Plateau of
Iran
Zagros
Persian
Gulf
Arabian
Peninsula
Rub' al Khali
Red Sea
Gulf of Aden
Africa
Sulaiman
Indus
Plateau of
Tibet
Himalaya
Brahmaputra
Indo Gangetic Plains
Ganges
Thar Desert
Narmada
Godavari
Krishna
Deccan
Cauveri
Palk Strait
Arabian Sea
Bay of
Bengal
Lakshadweep Is
(India)
Maldives
Indian Ocean
Andaman & Nicobar Is
(India)
Hwang-ho
Great Plain of
China
Yellow
Sea
East
China
Sea
Taiwan
Yangtse
Yunnan Plateau
Shan Plateau
Arakan Yoma
Irawaddy
Annam Range
Mekong
South
China
Sea
Gulf of Thailand
Singapore
Borneo
Indonesia
Philippines
Not to Scale

3. The Southern Plateaus

The southern plateaus are relatively lower than the northern plateaus. The four important southern plateaus are the **Arabian Plateau** (Saudi Arabia), **Deccan Plateau** (India), **Shan Plateau** (Myanmar) and the **Yunnan Plateau** (China). Among these plateaus, the Arabian Plateau is the largest Plateau.

4. The Great Plains

The great plains are formed by the major rivers of Asia. They are the **West Siberian plain** (Ob and Yenisey), **Manchurian Plain** (Amur), **Great Plain of China** (Yangtze and Sikiang), **Indo-Gangetic Plain** (Indus and Ganga), **Mesopotamian plain** (Tigris and Euphrates) and **the Irrawaddy plain** (Irrawaddy).

5. The Island

Numerous islands are found in the Pacific coast of Southeast Asia. **Kuril, Taiwan, Singapore** and **Borneo** are the important island.

The **Philippines, Japan islands** and **Indonesia** are the major archipelagos in Asia. Smaller archipelagos are also located in the Indian Ocean such as the islands of **Maldives** and **Lakshadweep** are in the **Arabian Sea. Bahrain** is in the **Persian Gulf. Sri Lanka** is an island, which is located in the Bay of Bengal.

DO YOU KNOW?

A group of islands is called an archipelago. The largest archipelago is Indonesia.

Drainage

The rivers of Asia originate mostly from the central highlands. The **Ob, Yenisey** and **Lena** are the major rivers that flow towards the north and drain into the Arctic Ocean. These rivers remain frozen during winter. On the other hand, South Asia has many perennial rivers (e.g.) **Brahmaputra, Indus, Ganga** and **Irrawaddy** which originate from the snow covered high mountains that do not freeze during winter. The **Euphrates** and **Tigris** flow in West Asia. **The Amur, Huang He,**

Major Rivers of Asia

S. No	Name of the River	Origin	Outflow	Length in Km
1	Yangtze	Tibetan plateau	East China sea	6,350
2	Hung Ho	Tibetan plateau	Gulf of Pohai	5,464
3	Mekong	Tibetan plateau	South China sea	4,350
4	Yenisey	Tannuala Mountain	Arctic Ocean	4,090
5	Ob	Altai Mountain	Gulf of Ob	3,650
6	Brahmaputra	Himalayas	Bay of Bengal	2,900
7	Indus	Himalayas	Arabian sea	3,610
8	Amur	Confluence of Shika and Argun rivers	Tatar Strait	2,824
9	Ganges	Himalayas	Bay of Bengal	2,525
10	Irrawaddy	North Myanmar	Bay of Bengal	2,170

Yangtze and **Mekong** rivers flow in the south and south eastern parts of Asia. **Yangtze** is the longest river in Asia.

River Yangtze

DO YOU KNOW?

The Three Gorges dam has been constructed across the river Yangtze. It is the largest power station dam in the world. It fulfills ten percent of power needs of China.

Climate

Asia exhibits a variety of climate. The northern part of Asia experiences severe long winter and short summer. **(Winter -37°C** and **Summer 10°C).** Precipitation is in the form of snow **(250 mm to 300 mm).**The north eastern part of Asia experiences cold winter and warm summer and a moderate rainfall of **50 mm to 250 mm**.

The south, south east and eastern parts of Asia are strongly influenced by monsoon winds. Summer is hot and humid while winter is cool and dry. The summer monsoon winds bring heavy rainfall to India, Bangladesh, Indo-China, Philippines and Southern China **(1500 mm to 2500 mm)**. In India, **Mawsynram (11871 mm)** receives the highest rainfall. So, this place is called the wettest place in the world.

The areas found in and around the equator have uniform climate throughout the year. There is no winter. The average temperature is **27°C** and the mean rainfall is **1270 mm**.

HOTS :

There is no winter in the equatorial region. Why?

The west and central parts of Asia have hot, dry climate. The temperature is very high during the day and very low during the night. Rainfall varies from **25 mm to 200 mm**. The West coastal fringe of Asia (along the Mediterranean Sea) receives **rainfall in winter** and is warm in summer.

Deserts are found along the western part of Asia. The major hot deserts are the **Arabian** (Saudi Arabia) and **Thar** (India and Pakistan) **deserts**. The cold deserts of Asia are **Gobi** and **Taklamakan**. The largest desert in Asia is the Arabian Desert.

Natural Vegetation

Natural vegetation depends upon **rainfall, temperature** and **soil**. As Asia stretches from the equator to poles, all types of vegetation are found here. Some rare species are found in Asia. Such as **Orang-Utan, Komodo Dragon, Giant panda**. The Asian flora and fauna are listed below:

The Natural Regions (Flora & Fauna)

Sl. No.	Climate	Location	Flora	Fauna
1	High Temperature, High rainfall	Indonesia, Malaysia, Singapore Sri Lanka	Evergreen trees - Mahogany, Rubber, Rosewood, Sal	Rhinoceros, Tiger, Babirusa, Orangutan, Komodo Dragon
2	Rainy Summer, Dry winter	India, Vietnam, Cambodia, Thailand, Southern China	Deciduous trees – Teak, Sandal wood, Bamboo	Tiger, Elephant, Indian Cobra, viper
3	Extreme climate	Arabian desert, North, North West India	Cactus, Dates (Oasis), Thorny shrubs, Babul tree	Bactrian Camel, The Sand grouse, desert oryx
4	Dry winter, Warm summer	East China, Japan, North and South Korea	Cherry, Apricot, Plum	Giant Panda, Japanese macaque
5	Warm Summer and rainy winter	Israel, Lebanon, Turkey, Syria	Figs, Olives, Citrus fruits	Lynx, Jackrabbit
6	Long and dry winter, short and cool summer	Siberia, Himalayas	Coniferous trees - Pine, Fir, Spruce	Siberian Tiger, Brown bear, Wolf
7	Permanent snow cover	Beyond the snow line	Lichen, mosses Grass	Polar bear, Lemming, Reindeer, Arctic fox

Orang-Utan

Tiger

Bactrian Camel

Panda

Wolf

Lynx

Fact: DESERT

A Desert is a large area that gets very low rainfall and very few plants and animals. There are two types of deserts found in Asia, Hot and cold deserts.

DO YOU KNOW?

Rub-Al Khali desert is the largest, continuous sandy desert in the world. It is found in the southeastern part of Saudi Arabia.

Resource Base and Economic Activities of Asia

Mineral Resources

Asia has a variety of mineral deposits. It holds an important place in the production of **Iron, Coal, Manganese, Bauxite, Zinc, Tungsten, Petroleum, Tin** etc. **Oil** and **Natural Gas** found in the west Asian countries. One third of the world's oil is produced in Asia. Among the west Asian countries, **Iran** has a considerable wealth of mineral resources. The important minerals found in Asia are:

Iron Ore: Asia has the largest deposits of iron ore in the world. **China** and **India** are the important iron ore deposit countries of Asia. **Turkey, Philippines, Malaysia, Thailand, Myanmar** etc., are a few other countries that have iron ore deposits.

Coal: Coal is a **fossil fuel.** Asia has the largest deposits of coal in the world. **China** and **India** are the largest producers of coal in Asia.

Petroleum: Petroleum is a **mineral oi**l. The largest petroleum reserves are found in South West Asia. The important petroleum producing countries are **Saudi Arabia, Kuwait, Iran, Bahrain, Qatar** and **UAE. South China, Malaysia, Brunei, Indonesia, India, Russia** are the other important petroleum producing countries in Asia.

Coal mine in India

Bauxite is found in India and **Indonesia**. **India** is the largest producer of **Mica** in the world. **Tin** is found in **Myanmar, Thailand, Malaysia** and **Indonesia**.

Agriculture

Only about 18 percent of the total area is cultivable in Asia. Agriculture is the chief occupation of the people here. The river valleys in the South, South East and East Asia have rich alluvial soil. Agriculture is intensively practised in the riverine plains of Asia. However, some areas are not suitable for agricultural practices. **India** has the largest area of **arable lands** in Asia. Most of the west Asian countries cultivate their crops where the ground water level is nearer to the surface. Iraq practices agricultural activities based on the availability of rainfall and supply of water from Euphrates and Tigris rivers.

Rice and **Wheat** are the staple food crops in Asia. China and India are the leading producers of rice in the world. Other important rice producing countries are **Myanmar, Japan, Bangladesh** and **Thailand**. Monsoon Asia is suitable for rice cultivation because of the abundant rainfall, fertile plains and availability of labour. **Thailand** is called the **Rice bowl** of South East Asia.

DO YOU KNOW?

Banaue rice terrace: The Banaue rice terraces were built 2000 year ago by the Ifugaos people in the Philippines. It is located approximately about 1524 m above sea level.

Wheat is grown in the **temperate** regions of Asia. **Russia, India, China** and **Pakistan** are the leading producers of wheat in Asia. Millets like **Bajra, Jower, Ragi and Sorgham** are grown in the drier parts of Asia. These are widely cultivated in **India, Pakistan** and a few **gulf countries**. Apart from these, **pulses, spices** and **oil seeds** are also cultivated in various parts of Asia.

Jute and cotton are the important natural fibres cultivated in Asia. One third of the world's cotton is produced by Asia. The major cotton producing countries are **India**, **China, Russia** and **Kazakhstan**. **India, Pakistan, China** and **Bangladesh** are the leading producers of **jute**.

The tropical wet and dry climate is suitable for **sugarcane** cultivation in Asia. **India, Indonesia** and **Philippines** are the major producers of sugarcane. **Coffee, Tea, Rubber, Palm trees** and **Cocoa** are the important plantation crops. **India, Sri Lanka, Thailand, Vietnam, Malaysia** and **Indonesia** are important an producers of plantation crops. **Malaysia** and **Thailand** are the leading producers of **natural rubber.**

Dates are produced in west Asia, among the countries Iran is the largest producer of dates in the world.

Cocoa Tree

Fishing

Fishing is an important economic activity in Asia. It is prevalent in open seas as well as inland water bodies. **China** and **Japan** are the leading fishing nations. In **Cambodia, Tonle Sap** lake is one of the world's richest sources of fresh water fishing. Bay of Bengal is the major fishing ground for India, Sri Lanka, Myanmar and Bangladesh. Fishing is the mainstay of the national economy in **Maldives**. **Pearl fishing** (Bahrein) is popular in the eastern **coast of Arabia**.

Industrial Regions

In **China,** Manchurian, Shanghai-Wuhan, Peking—Shenyang, Guangdone-Hongkong regions are the major industrial regions. In **Japan,** the major regions are Tokyo, Yokohama and Osaka-Kyoto regions. In **India**, Mumbai, Ahmedabad, Coimbatore, Bengaluru and Chottanagpur are the important industrial regions.

Trasport

Transport is the backbone of the economic development of a region. Many Asian countries are developing their transport network for their economic progress. Roadway is the most common mode of transport in Asia.

Roadways

The Asian Highway connects Tokyo in the east to Turkey in the west, Russia in the north to Indonesia in the south and the total length of road is 1,41,000 km. It passes through 32 countries. The Asian Highway 1(AH 1) is the longest highway among the Asian Highway Network (20557 km). It connects Tokyo to Turkey. The Asian Highway 43 (AH 43) runs from Agra in India to Matara in Sri Lanka (3024 km).

Railways

The **Trans - Siberian Railways (9258 km)** is the longest rail route in the world. It is a **transcontinental railway** line which connects **Leningrad** and **Vladivostok**. T**he Trans Asian Railway links Singapore** and **Istanbul** in Turkey. The **Shinkansen, bullet train** is the world famous super express train that runs between **Osaka and Tokyo** in Japan at a speed of 352 km/h. The Indian railway network is the second largest railway network in Asia.

Waterways

The **Cape of Good Hope** route connects **Europe** to **South Asia**. The **Trans Pacific route** connects the ports of eastern Asia to the ports of western American countries. **The Suez Canal route** passes through the heart of the world trade route and connects Europe with South and Southeast Asia. **Tokyo, Shanghai, Singapore, Hong Kong, Chennai, Mumbai, Karachi** and **Dubai** are the important seaports in Asia.

Shanghai Port

CULTURAL MOSAIC OF ASIA

Population

Asia is the most populated continent in the world. Approximately six-tenth of the world's population lives in Asia. The population is unevenly distributed because of various physical features. **China** and **India** alone covers three fifth of Asia's population. Apart

9C063

from these two countries, **Bangladesh, Indonesia, Japan, Pakistan** and **Philippines** have more than 100 million populations. The population density in Asia is **143 persons per Km^2**. India, Japan, Bangladesh and Singapore have high population density. River plains and industrial regions have high density of population, whereas low density is found in the interior parts of Asia.

HOTS :

Few countries in Asia have high population. Give reasons.

DO YOU KNOW?

ANKORWAT: It is a world heritage site. It was built by king Suriya Varma II in 1100 AD(CE) at Cambodia. **'Ankorwat' means 'the city of temples'** in Khmer language. It is the largest Hindu Temple in the world.

Religion & Language:

Hinduism, **Islam**, **Buddhism Christianity** and **Sikhism** are the major creeds in Asia. The minor creeds **Zoroastrianism, Jainism, Shintoism, Confucianism** and **Taoism** are also practised in Asia. **Mandarin, English, Indonesian, Japanese, Arabic, Korea, Vietnamese** and **Hindi** are the most widely spoken languages in Asia.

Art and Architecture:

Asia is the home land of three civilizations.(Mesopotamian, Indus valley and Chinese civilizations).These three contributed to the architectural works at an early stage.

Among the seven wonders of the world, two are **located in Asia (The Tajmahal in India, The Great wall of China)**.The people of Yemen built a **mud skyscraper** thousands of years ago. **Ankorwat** in Cambodia, **Buddhist Temple** in East and Southeast Asia, Mosques in west Asia and the temples and forts in India are fine examples of Asian architecture.

Food:

Rice, Wheat, Maize and **Barley** are the staple food in Asia. Dairy products, fruits and nuts are also consumed. In East Asia, bread and noodles are the staple food where rice is not available. **Tea**, **Coffee** and **green tea** are the chief beverages. In West Asia, meat, herbs and olive oil are the prime ingredients in their food.

Dance and Music:

kabuki

Yangee, **Dragon Dance**, **Kabaki** are popular in East Asia, **Ram Thai** in Thailand,

Bhangra, Kathak and **Bharathanatyam** in India are also important dances in Asia. **Sufi music** and **Arabic classical music** are common in west Asia. **Tinikling** is the national dance of Philippines.

Festivals:

Mid Autumn festival

The **mid autumn festival / moon festival** in China, Taiwan and Vietnam. **Holi** and **Mahara Sankaranthi / Pongal** in major parts of India and **Sukkoth** in Israel are the important **harvest festivals** of Asia. The **snow sculpture festival**, **Chinese New Year**, **Thaipusam, Diwali, Taiwan Lantern festival, Songkran, winter light festival** are also some of the famous festivals in Asia.

Land of contrasts

Asia is the biggest continent. It has different types of land features such as mountain, plateau, plain, valley, bay, island etc. It also has different climatic conditions from the equator to polar region. Apart from this, many races, languages, religions and cultures are followed by people who live in Asia. So, Asia is called '**the land of contrasts**'.

Part – B Europe

Europe is the sixth largest continent in size and the third largest in population in the world. It has diverse landforms and people. It is the birth place of **western civilizations** (Roman and Greek), **democracy** and **Industrial Revolution**. It is the most developed continent in the world. Let us explore the continent.

Europe is found in the northern hemisphere and it covers an area of 10.5 million sq.km. It is surrounded by the Arctic Ocean in the North, the Black Sea and Mediterranean Sea in the south, the Atlantic Ocean in the west and the Ural mountains in the east. So it looks like a **giant peninsula**.

Location and area

Europe spreads from **34º 51' North** latitude to **81º 47' North** latitude and from **24º33**' West longitude to **69º 03' East** longitude. The **Prime Meridian 0º** longitude passes through **Greenwich** in England.

> **HOTS :**
>
> Europe is called as the 'Peninsula of Peninsulas', Justify.

Political Divisions

EUROPE - POLITICAL

European Union : The European Union (EU) is an economic and political union of 27 member countries for their welfare. It has own flag and the common currency, the Euro (€).

Fact :

The Netherlands : About 25 percent of the Netherlands lies below sea level. So they have built dikes. They have reclaimed new land from the sea with the help of dikes. These reclaimed lands are called polders.

Physical Divisions

Europe has diversified physical features such as mountains, plains, plateaus, peninsulas, bays, islands and river basins. It can be divided into four physical divisions.

1. **The North Western Highlands**
2. **The Central Plateaus/High land**
3. **The Alpine Mountain system**
4. **The North European plains**

1. The North Western highlands

This region includes the mountains and plateaus of Norway, Sweden, Finland, Scotland and Iceland. This region has the most beautiful **fiord coast**. It was created by glaciations in the past. This region has a lot of lakes, which serve as reservoirs for producing hydroelectricity. Norway and Sweden are the largest producers of hydroelectricity in the world.

Fact :

Fiord : A fjord is a narrow and deep sea inlet between steep cliffs.

1. It reduces the speed of wind, irrespective of its direction.
2. The force of sea waves are also controlled.

Hence, areas with fiords are best suited for natural harbours.

Fiord coast in Norway

2. The Central Plateaus

The plateaus are found in east west direction across central Europe. Many rivers in Europe such as, the Danube, the Volga and the Tagus originate from this plateau. The important plateaus of this region are The **Pennines** (England), The **Meseta** (Spain), **The Central Massif** and **Jura** (France). The **Black forest** (Germany) in these region has rich mineral resources. The **Pennines** is called the **backbone of England**.

R. River Mts. Mountains L. Lake m. Metres

DO YOU KNOW?

Black forest: The lush and dark coloured fig and pine trees give black colour to this region.

3. The Alpine Mountain System:

The alpine mountain system consists of a chain of young fold mountains found in the southern part of Europe. The important mountain ranges are **the Sierra Nevada**, the **Pyrenees, the Alps, the Apennines, the Dinaric Alps, the Caucasus** and **the Carpathian**. The Pyrenees forms a natural boundary between Spain and France.

The highest peak in Europe is **Mt. Elburz** (5645 m) in the Caucasus range. The **Mont Blanc** (4,807 m) found in the Alps is the second highest peak in the Alpine System.

Mont Blanc

There are several active volcanoes found in the Alpine mountain system. **Mt. Etna**, **Mt. Vesuvius** and **Mt. Stromboli** are the important volcanoes found in Europe. Earthquakes are common in this region. The Stromboli is called the '**light house of the Mediterranean**'.

DO YOU KNOW?

The Matterhorn : The pyramid-shaped Matterhorn mountain is located in the Swiss Alps a height of 4478 m. It is popular for its shape.

4. The North European plain

The north European plain stretches from the Atlantic Ocean in the west to the Ural mountains in the east. On the north, it is surrounded by the Baltic Sea and on the South by the alpine mountain. It is narrow in the West and wide towards the East.

Major European rivers such as the Seine, the Rhine, the Danube and the Don criss-cross this region and deposit their alluvium.

The **Andalusian Plain, The Hungarian Plain** and **the Wallachian Plain** are also found in this region. It has rich deposits of coal and iron ore. The north European plain is densely populated region and cities like **Paris, Moscow** and **Berlin** are located here.

Drainage

The rivers play an important role in the development of Europe. These rivers are used to irrigate farmland and also help to produce electricity.

The Important Rivers in Europe

S. No	Rivers	Length (Km)	Source	Out flow
1	Volga	3,692	Valdes plateau	Caspian Sea
2	Danube	2,860	Black forest	Black Sea
3	Dnieper	2,145	Valdai Hills	Black Sea
4	Rhine	1,230	Alps (Switzerland)	North Sea
5	Rhone	813	Swiss Alps	Mediterranean Sea
6	Po	652	Cottian Alps	Adriatic Sea
7	Thames	346	Kemble	North Sea

Source w.w.w.worldatlas.com

Most of the rivers originate in the Alps and the central plateau of Europe. These rivers are useful for inland navigation in central and Eastern Europe. The **Volga** is the longest river in Europe. The river **Danube** passes through Ten countries in Europe.

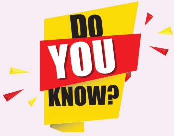
River Danube

HOTS :

Why are European rivers suitable for inland navigation?

Climate

The climate of Europe varies from the subtropical to the polar climate. The **Mediterranean climate** of the south has warm summer and rainy winter. The western and northwestern parts have a mild, generally **humid climate**, influenced by **the North Atlantic Drift**. In central and eastern Europe, the climate is humid **continental-type.** In the northeast, subarctic and tundra climates are found. The whole of Europe is subject to the moderating influence of prevailing **westerly winds** from the Atlantic Ocean.



Climate Divider: The Alps mountain separates the Mediterranean climate from the cold climate of the north.

Fact

North Atlantic Drift is a warm ocean current which brings warmth to the western Europe. The westerly wind further transports warmth across Europe.

Natural vegetation

The natural vegetation of Europe can be classified as follows:

1. Tundra

2. Taiga or Coniferous

3. Mixed Forest

4. Mediterranean Forest

5. Grassland

The Arctic and northern Scandinavian highland have Tundra type of vegetation made up of lichens and mosses.

Coniferous Forest

Coniferous or Taiga vegetations are found to the south of the Tundra region in Norway, Sweden, Finland, Germany, Poland and Austria. **Pine, fir, spruce** and **larch** are the important tree varieties of taiga forest.

The mixed forest comprising of **birch, beech, poplar, oak** and **maple trees** found in the western part of Europe particularly in western France, Belgium, Denmark, Britain etc. **Mediterranean trees like cypress**, c**ork, oak, olive** and **cedar** are found along the borders of the Mediterranean Sea. Eastern Europe is covered by grasslands (Steppe).

Resources Base and Economic Activities of Europe

Availability of resources, efficient educated work force, research, contact with other nations and innovations have transformed Europe into a modern and economically developed continent in the world.

Europe is an industrially developed continent in the world. It has great diversity in its topography, climate and soil. These interact to produce varied patterns of agricultural activities such as **Mediterranean agriculture, Dairy farming, mixed livestock** and **crop farming and horticulture** (Truck Farming)

Tulip Flower Garden

Wheat is the dominant crop throughout Europe. **Barley, Oats, sugar beet, rye, potatoes** and **hay** are also common crops. Corn (maize) is an important crop in the lower Danubian lowlands and southwestern European Russia, France and **Italy. Rice** (northern Italy) and **citrus fruits, olive trees** (Spain, Sicily) depend on irrigation.

Olive tree

The northernmost countries grow few cereals (mainly oats) and concentrate on animal husbandry, especially cattle and dairying. Mixed farming and the use of well-

tried crop rotations are widely practised. **Viticulture** is mostly practised in Italy, France and Germany.

Vineyard

As for industrial crops, European Russia, Ukraine, and Belarus are large producers of **flax** and **hemp, sugar beets** and **sunflower seeds**. T**obacco** is grown in Belarus and is also important in Bulgaria, Italy, and Macedonian Greece.

European Russia, Sweden and Finland are the major producers of softwood and hardwood. Fishing is a large industry in Norway, Iceland, Russia, Denmark, the United Kingdom, the Netherlands etc., The **Dogger Bank** in North Sea is an important fishing ground in Europe.

Industries

Europe produces a significant portion of the world's steel and iron ore. Shipbuilding, motor-vehicle and aircraft construction are widely distributed all over Europe. Europe is also a large producer of pharmaceutical drugs.

A wide range of small-scale industries (i.e., those that produce nondurable goods) is found throughout Europe. Some countries have a reputation for specialty goods, as in the case of English, Italian, and Dutch bicycles, Swedish and Finnish glass, Parisian perfumes and fashion goods and Swiss precision instruments.

Cultural Mosaic of Europe

Europe is the third most populous continent, after Asia and Africa. The population of Europe was 742 million in 2018, which accounted for 9.73% of the world's population. The population density in Europe is 34 persons / km^2.

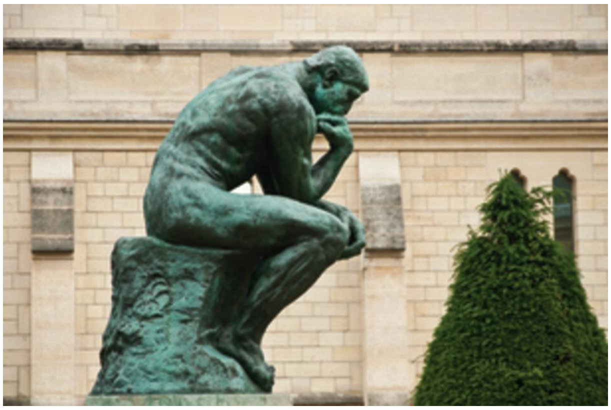
High population density is often associated with the coalfields of Europe. Other populous areas are sustained by mining, manufacturing, commerce, offering large market, labour forces and productive agriculture. Monaco, Malta, San Marino, and the Netherlands are the most densely populated countries; Iceland and Norway have very low density of population. In general, population is scantiest in the mountain regions, some highlands, arid parts of Spain and the Arctic regions of Russia. Monaco has the highest density of population in Europe (26,105 persons / km^2) as well as in the world. Iceland has a very low density of population (3 persons/ km^2).

Religion & Language

Europe is a continent of great linguistic and cultural difference. English, Spanish, Portuguese, French, Italian and Slavic are the broadly spoken languages in Europe. Christianity is the major religion in Europe. A considerable number of Hindus, Muslims and Jews are spread throughout Europe. More than 90 percent of the people belong to the Caucasoid race.

Art and Architecture

European art and architecture mostly reveals the ordinary human being and is popular all over the world. **Acropolis, the Colosseum, the statue of David, The thinker, Eiffel tower, Big Ben, Pisa Tower** and **Mona Lisa** are some of the master pieces of art and architecture in Europe.



The Thinker

Big Ben in London

Eiffel Tower

The Colosseum

Food and Festivals

Bread, fish, meat, potatoes and dairy products are the staple food in Europe. The Europeans celebrate both religious and holiday festivals. Christmas, Easter, Good Friday, the Saint Day, Redentore, Tomatina and Carnival are the important festivals of Europe. They play Rugby, foot ball, basket ball, ice hockey and skiing. Bull fighting in Spain is the world's attractive game.

Tomatina Festival

A Comparison of Asia and Europe

Asia and Europe are integrated geographically and separated politically. Europe is the giant peninsula of Asia. Both the Himalayas (Asia) and the Alps (Europe) were formed during the same geological period. The Steppe grass lands and coniferous forests are spread over

several hundred kilometres from Europe to Asia. Generally, the plains are found in the northern part and the mountains in the southern part in both the continents. The two continents are the homeland of ancient civilizations. From the ancient period, these two continents had trade relationship through the silk route and the spice route. Despite the various geographical similarities, these two continents have striking differences.

Asia	Europe
1. It is the largest continent, both by area and population.	1. It is the smallest continent by area and the most developed.
2. It extends from 10° 11′ S to 81° 12′ N latitudes. That is, from the equatorial region to the polar region.	2. It extends from 34° 51′ N to 81° 47′N latitudes. That is, from the sub-tropical region to the polar region.
3. It is located on the eastern hemisphere	3. It is located at the centre of the earth.
4. The Bering Strait separates Asia and North America.	4. The Strait of Gibraltar separates Europe from Africa.
5. The Arabian, Indo China, India and Korea are the important peninsulas in Asia.	5. The Scandinavian, Iberian, Italian and Balkan are the important peninsulas in Europe.
6. The important parallels such as the Equator, Tropic of Cancer, Arctic Circle pass through it.	6. Only the Arctic Circle passes through it.
7. All kinds of climatic conditions are found here. It also enjoys the distinctive monsoon type of climate Southern Asia receives summer rainfall.	7. It lies in the temperate zone. It enjoys the distinctive Mediterranean type of climate. Southern Europe receives winter rainfall.
8. Both hot and cold deserts are located here.	8. There are no deserts here.
9. It has a variety of mineral deposits .	9. Mineral resources are limited, except for coal & iron.
10. Plantation crops such as tea, rubber and dates are largely cultivated in Asia.	10. Citrus fruits, olives and grapes are cultivated mostly in Asia.
11. A majority of people in Asia are involved in primary activities.	11. A majority of people in Europe are involved in secondary and tertiary activities.

Recap

- Asia is the largest and the most populous continent in the world. It is divided into five physical divisions.
- From the equator to the poles, all types of climate are found in Asia.
- The treeless polar region to dense equatorial forest are found in Asia.
- Iron ore, coal, petroleum, Bauxite, mica, tin, zinc etc. are the chief minerals found in Asia.
- Rice, wheat, sugarcane, jute, cotton, tea, coffee and dates are the important crops.
- Asia is the birthplace of all religions.
- Europe is the sixth largest continent. It is divided into four physical divisions.
- The European rivers play a Vital role to the country economy.
- Europe experiences a cool temperate climate.
- Mixed farming is the most widely practised type of agriculture in Europe.
- Coal and Iron ore are a cheap minerals found in Europe.
- Christianity is the major religion in Europe.

Glossary

- Beverage – a drink other than water
- Perennial – Continuing throughout the entire year
- Monsoon wind – The seasonal wind of the Indian ocean
- Tundra – A vast, flat, treeless Arctic
- Riverine – Situated beside a river
- Staple food – food that makes up the dominant part of people's diet
- Irrigation – The artificial application of water to land
- Husbandry – The care, cultivation and breeding of crops and animals
- Viticulture – The cultivation of grapevines
- Steppes – a large area of flat unforested grassland in Siberia.
- Polder – A piece of low lying land reclaimed from the sea
- Race – a group of people who have similarities in biological traits.
- Horticulture – the art of garden cultivation and management (vegetables, fruits and flowers)

Exercise

I. Choose the correct answer

1. Which is not the western margin of Asia?
   a) Black Sea
   b) Mediterranean Sea
   c) Red Sea
   d) Arabian Sea

2. The Intermontane ______ plateau is found between Elbruz and Zagros.
   a) Tibet b) Iran
   c) Deccan d) The Yunnan

3. Equatorial climate:
   (i) Uniform throughout the year.
   (ii) The average / mean rainfall is 200 mm.
   (iii) The average temperature is 10°C.
   (iv) Of the statements give above,
   a) i alone is correct
   b) ii and iii are correct
   c) i and iii are correct
   d) i and ii are correct
4. Match list I correctly with list II and select your answer from the codes given below.

	List – I	List – II
A.	Malaysia	1. Figs
B.	Thailand	2. Rubber
C.	Korea	3. Teak
D.	Israel	4. Cherry

Codes

A B C D

a) 2, 3, 4, 1
b) 4, 3, 2, 1
c) 4, 3, 1, 2
d) 2, 3, 1, 4

5. India is the leading producer of ____________.
   a) Zinc   b) Mica
   c) Manganese   d) Coal
6. The natural boundary between Spain and France is ____________.
   a) The Alps   b) The Pyrenees
   c) The Carpathian   d) The Caucasus
7. The western and north-western Europe enjoys mild and humid climate. Choose the correct option:
   a) These regions are found near the equator
   b) It is influenced by the North Atlantic Drift
   c) It is surrounded by mountains
   d) All of the above
8. Which of the following statements is incorrect?
   a) Europe produces electricity from hydel power
   b) All the rivers of Europe originate in the Alps
   c) Most of the rivers in Europe are used for inland navigation
   d) The rivers of Europe are perennial in nature
9. Choose the incorrect pair.
   a) The Meseta - Spain
   b) The Jura - France
   c) The Pennines - Italy
   d) The Black Forest - Germany
10. Which country in Europe has a very low density of population?
   a) Iceland   b) The Netherlands
   c) Poland   d) Switzerland

II Fill in the blanks.

1. The Taurus and the Pontine ranges radiate from the _________ knot.
2. The wettest place in the world is _________
3. Iran is the largest producer of _________ in the world.

4. Europe connected with south and south east Asia by _________ sea route.
5. The national dance of Philippines is _________.
6. The second highest peak in Europe is _________.
7. The type of climate that prevails in the central and eastern parts of Europe is _________.
8. The important fishing ground in North Sea is _________.
9. The density of population in Europe is _________.
10. The river _________ passes through Ten countries of Europe.

III Match The Following

1. Mesopotomian Plain	-	Highest Rainfall
2. Mawsynram	-	Norway
3. Rice Bowl of Asia	-	Spain southeast
4. Fjord Coast	-	Euphrates & Tigris
5. Bull Fighting	-	Thailand

IV Let us learn

1. **Assertion (A):** Italy has dry summers and rainy winters

   Reason (R): It is located in the Mediterranean region

a) Both A and R are individually true and R is the correct explanation for A

b) Both A and R are individually true but R is not the correct explanation for A

c) A is true, but R is false

d) A is false, but R is true

2. Places marked as 1, 2, 3 and 4 in the given map are noted for the following plains.

ASIA

A. Indo – Gangetic plain
B. Manchurian plain
C. Mesopotamian
D. Great plains of China

Match the plains with the notation on the map and select the correct answer using the codes given below.

Codes:

	A	B	C	D
a)	2	1	4	3
b)	2	1	3	4
c)	1	2	3	4
d)	1	4	3	2

3. In the given outline map of Asia, the shaded areas indicate the cultivation of

ASIA

a) sugarcane b) Dates
c) Rubber d) Jute

V. Answer in Brief

1. Name the important intermontane plateaus found in Asia.
2. Write a short note on monsoon climate.
3. How does physiography play a vital role in determining the population of Asia?
4. Name the ports found is Asia.
5. Asia is called the 'Land of Contrasts'- Justify.
6. Name the important mountains found in the Alpine system.
7. What are the important rivers of Europe?
8. Name a few countries which enjoy the Mediterranean type of climate.
9. Give a short note on the population of Europe.
10. Name the important festivals celebrated in Europe.

VI. Distinguish

1. Intermontane plateaus and southern plateaus.
2. Cold desert and hot desert
3. Tundra and Taiga.
4. The North western highlands and the Alpine mountain range.

VII. Give Reasons

1. Asia is the leading producer of rice.
2. Asia is the largest and most populous continent in the world.
3. Europe is called 'a giant peninsula'.
4. Although Western Europe is located in the high latitudes, it has a moderate climate.

VIII. Answer in Paragraph

1. Give an account of the drainage system in Asia.
2. Describe the mineral sources found in Asia.
3. What are fjords? How do they protect harbours from bad weather conditions?
4. Describe the climatic divisions of Europe.

IX. Map Skill

Mark the following in the outline map of Asia and Europe.

Asia : Ural mountain, Himalayas, Pamir knot, Gobi Desert, Arabian Peninsula, Deccan plateau, River Yangtze, River Ob, Aral Sea and Lake Baykal.

Europe : The Pyrenees, Black forest, Apennines, Hungarian Plain, Caucasus Mountain, River Volga, River Danube, Strait of Gibraltar, Lake Ladoga, North Sea

X .Activity

1. Complete the following.

I belong to ____ district. My district is famous for the following: 1. ____, 2. ____ and 3. ____. The boundaries of my districts are ____ in the north, ____ in the east, ____ in the south and ____ in the west. It spreads for an area of ____ km^2. There are ____ taluks and ____ villages in my district. ____, ____, ____ are the important

mountain / plain / plateaus (If all, mention all features). The rivers ____, ____, ____ criss – cross my district. ____, ____, ____ are common trees and wildlife such as ____, ____, ____ are found here. ____, ____, ____ are important minerals available in my district. Based on this ____, ____ industries are located here. The major crops are ____, ____, ____. (Coastal districts may write the variety of fish). The total population is ____. We celebrate ____, ____, ____ festivals.

2. If you get a chance to settle in Europe, which country would you choose? List out the reasons why?

3. Choose any region is Asia. In the map of Asia, mark its distribution of natural vegetation and wildlife. Paste related pictures.

Reference

1. Douglas L. Johnson, Viola Haarmann, Merril L. Johnson, David L. Clawson (2012), World Regional Geography, A Development Approach, PHI Learning Private Limited, New Delhi, India.

2. JohnCole, (2010), Geography, of the world's Major Regions, Routledge, London.

3. Majid Husain (2017), Indian and world Geography McGraw Hill Education (India) Private Limited, New Delhi, India.

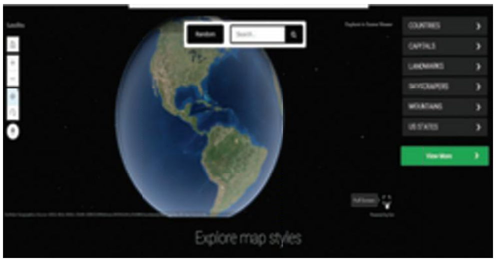
Web Links

1. https://www.whatarethe 7continents.com
2. www.natural history on the Net.com
3. www.worldatlas.com
4. www.internetgeographynet
5. www.worldometers.info

ICT CORNER

Asia and Europe

Through this activity you will know about in their proper location on the map of Asia and Europe.



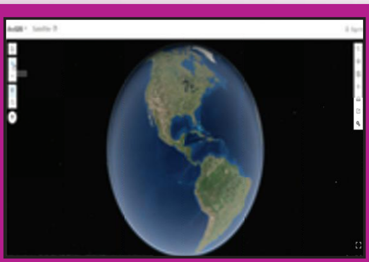
Steps:

Step -1 Use the URL or scan the QR code to open the activity page.

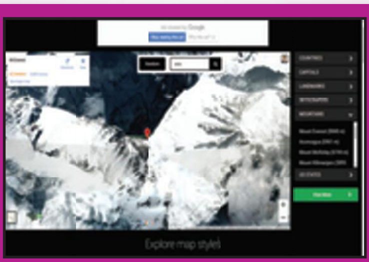
Step -2 Click the "Search" box and text Asia and Europe.

Step -3 Click the "+" "-" button to zoom in and out.

Step -4 Click the "Full screen" option to appear full screen mode.



Step 1



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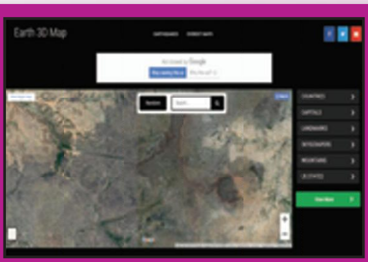

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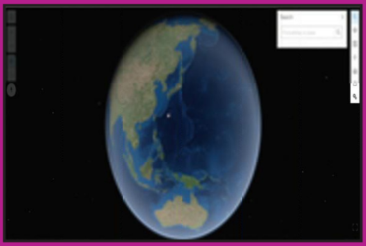


Step 4

Browse in the link

Web: http://earth3dmap.com/#?l=asia (or) scan the QR Code

*Pictures are indicatives only.

Unit 2

Globe

Learning Objectives

- To understand the four cardinal directions.
- To learn about the shape of the Earth.
- To understand about the model of the Earth - the globe.
- To understand the significance of lines of latitudes and longitudes.
- To know how standard time is calculated around the world.

Surya and Poovendhan are very good friends who study in the sixth standard and live in a beautiful village called Thirunandriyur. Surya lives in South Street, while Poovendhan lives in North Street. Every day they go to school together. One day.........

Surya: Why are you coming so late, Poovendha?

Poovendhan: Please bear with me, Surya! Come, let's go.

Surya: What took you so long?

Poovendhan: You live on South Street. But, I have to come from the North Street, which is so far away from here. That's why I'm late.

Surya: Yes, that's true. But wherever we live, don't you remember that we all live on planet Earth?

Poovendhan: Yes! Yes! I do remember, Even our **Ponni Miss** taught us about the **Solar System**.

Surya: But, I have a doubt ….

Poovendhan: Tell me, what is it?

Surya: We can see our house, the things around us, the people, animals and birds with our eyes. But, why can't we see our Earth as a whole?

Poovendhan: Haven't you seen it?

Surya: No, I haven't. Have you ever seen it?

Poovendhan: Yes, in our school only.

Surya: Did you say, in our school?

Poovendhan: Yes, on our **Ponni Miss'** table. Big and spherical!

Surya: Oh! Yes! Like a ball on a stand?

Poovendhan: Exactly! That is our Earth

Surya: But........ But, our teacher said that our **Earth** is in the **Milky Way Galaxy.** But you say that our Earth is on our teacher's table. I am so confused. Come, let's go and ask Ponni Miss.

The bell rang as they reached school. They attended the morning assembly and went to the classroom. During the social science period, Surya asks Ponni Miss to clear his doubts.

Surya: Good morning, Miss.

Teacher: Good morning.

Surya: Madam, you told us on the other day that our Earth is in the Milky Way galaxy.

Teacher: Yes, it is true. This is the model of the Earth.

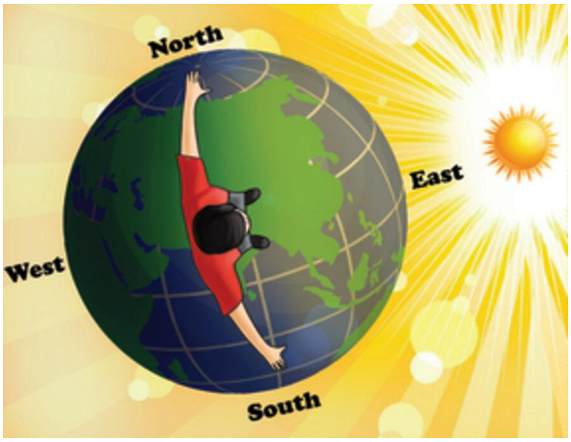
Surya: A model of the earth, Madam? Please explain!

Teacher: Sure, Surya.

The teacher asks all the students to sit down and starts explaining.

Directions

The directions on the ground are always shown with respect to the North. If we know the **North**, then it is easy to find the other directions, namely **South, East** and **West**. These are the four **cardinal directions**.



We know that the Sun rises in the East and sets in the West. If we stand facing the sun in the morning, then we face the east. The west is towards our back. The left hand points towards the north and the right hand points towards the south. We should always keep this in mind.

Globe

We live on the planet Earth, which is found third from the Sun. Since the Earth is huge and we live on a very small area, we are not able to see the Earth as a whole. But, when we travel to space, we can see the Earth as a whole.

So, in order to see the shape of the Earth as a whole and to know its unique features, a three dimensional model of the Earth was created with a specific scale.

DO YOU KNOW?

The surface area of the Earth is 510.1 million square kilometres.

The Earth which is spherical, is flat at the poles and bulges at the Equator. The Earth cannot be compared with any other geometrical shape as it has a very unique shape. Hence, its shape is called a **geoid** (earth shaped).

The Earth moves around the Sun. It also rotates from the West to East on its axis at an inclination of 23 ½°. The globe is also inclined at an angle of 23 ½°. The axis is an imaginary line. It is not actually found on the Earth.

DO YOU KNOW?

- The first globe was created by the **Greeks** in the year 150 AD(CE).
- The Indian astronomer **Aryabhatta-I** has mentioned in his book. **'Aryabhatta Sidhantha'. 'The stars in the sky seem to move towards the West because of the Earth's roation on its axis'**.

Lines on the Globe

There are imaginary lines which are drawn on the globe horizontally and vertically to find a location and calculate distance and time. These imaginary lines are called lines of **latitudes and longitudes.**

DO YOU KNOW?

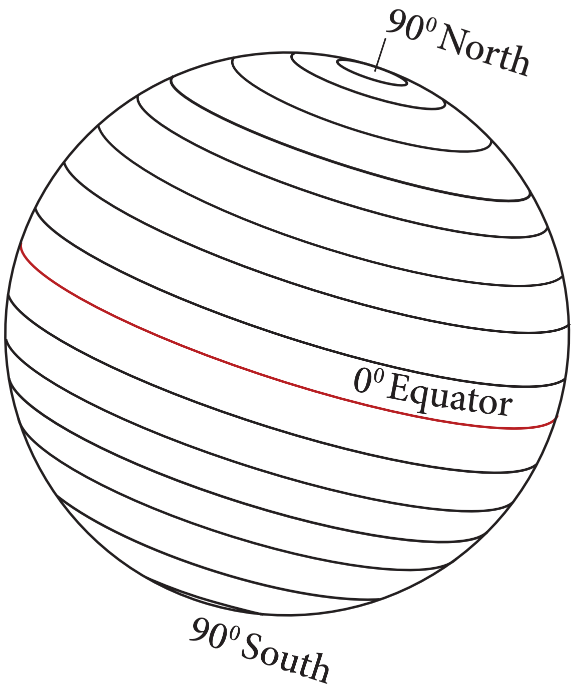
Ptolemy, a Greco – Roman mathematician, astronomer and geographer, was the first person to draw the lines of latitude and longitude on a map.

In his book, **'Geographia'** a detailed description about the Earth's surface, its size and circumference and many locations based on the lines of latitude and longitude are given.

Latitudes

The imaginary lines which are drawn horizontally on East - West direction on the Earth are called the lines or **parallels** of **latitudes**.

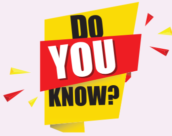
The 0° line of latitude which divides the Earth into two halves is known as the **Equator**. From the Equator, **parallel** lines are drawn towards the North and South poles at equal intervals. The latitudinal extent between **1°** line of latitude on Earth is **111 km**.



Since the Earth is geoid shaped, the length of the lines of latitude decreases from the Equator towards the South and North Poles. The 90° North and South Poles are not found as lines, but as points.

The lines of latitude that are drawn horizontally between the Equator and the North Pole are called **'Northern latitudes'** and those which are found between the Equator and the South Pole are called **'Southern Latitudes'.**

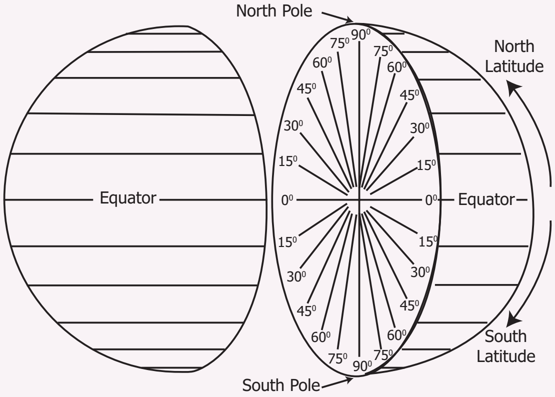
The lines of latitude consist of **89** parallels in the Northern Hemisphere and **89** parallels in the Southern Hemisphere, **one** at the Equator and the **two** poles are found as points. Totally, there are **181 parallels** found on earth.



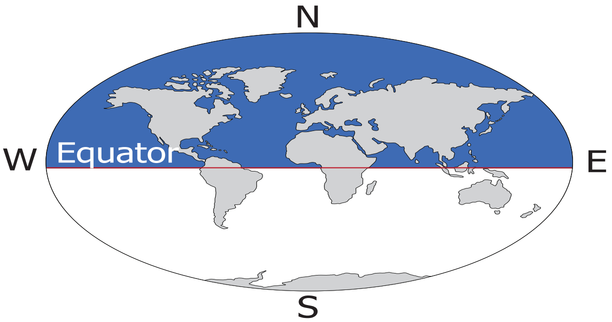
The Equator is the longest of all lines of latitude. Hence, it is also known as **'The Great Circle'.**

Activity :

Draw a circle on a paper. Draw a horizontal line across the middle of a circle. Keeping this line as 0°, draw lines on both sides with an equal interval of 15° with the help of a protractor. The lines you have drawn are lines of latitudes.

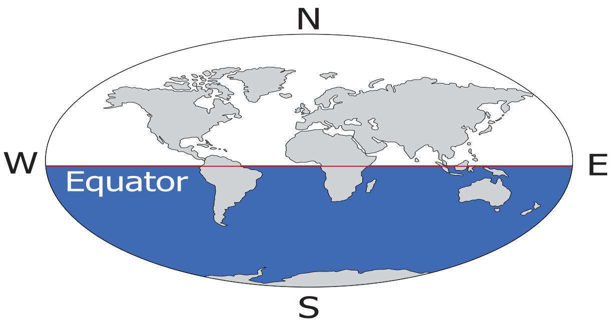


Northern Hemisphere



The area of the Earth found between the Equator (0^0) and the North Pole (90°N) is called the **Northern Hemisphere**.

Southern Hemisphere



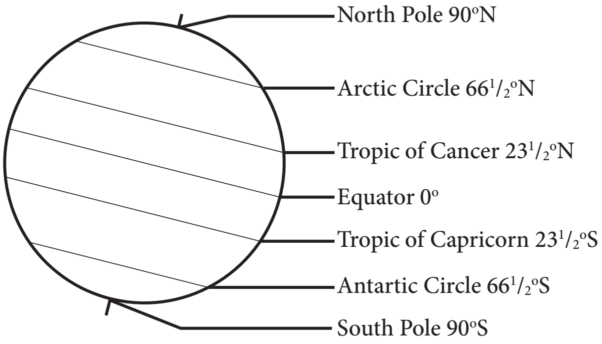
The area of the Earth from the equator (0°) to the South Pole (90°S) is called the **Southern Hemisphere**.

The location of any country or place is based on this division of the hemispheres.

> **HOTS**
>
> Based on the latitudinal extent, in which hemisphere is India located?

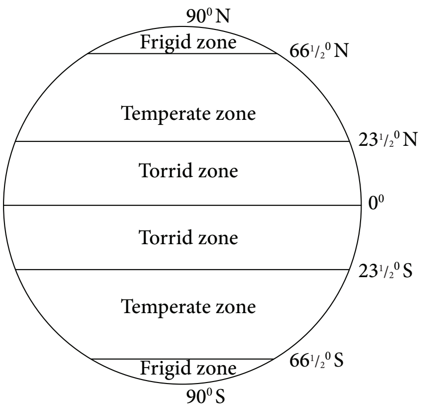
Important lines of latitude

The earth rotates on its axis at an inclination of 23½°. It also revolves around the sun while rotating. Based on the angle at which the sun's rays fall on the earth, certain lines of latitude gain significance.



> **DO YOU KNOW?**
>
> - 0°**N** and **S** – 23½°**N** and **S** lines of latitudes are called – **Low latitudes**
> - 23½°**N** and **S** – 66½°**N** and **S** lines of latitudes are called – **Middle Latitudes**
> - 66½°**N** and **S** – 90°**N** and **S** lines of latitudes are called – **High Latitudes**
>
> (**Source :** A Dictionary of Geography – Susan Mayhew, Oxford University Press, Fifth edition -2015)

The Sun's rays do not fall equally on all parts of the earth. They fall vertically over the Equator and slanting towards the poles. Thus, all the places on earth do not have the same amount of temperature. Based on the amount of heat received from the Sun, the lines of latitude help in dividing the earth into different climatic zones.



Torrid Zone

The region from the Equator towards the Tropic of Cancer (23½°N) and the Tropic of Capricorn (23½°S) is called the Torrid Zone. The Sun's rays fall vertically over this region and the average temperature is very high. Hence this region is known as the **Torrid Zone.**

Temperate Zone

From the Tropic of Cancer (23½°N) to the Arctic Circle (66½°N) and from the Tropic of Capricorn (23½°S) to the Antarctic Circle (66½°S), the Sun's rays fall slantingly. Moderate temperature prevails in this region. Hence, this region is called **Temperate Zone.**

Frigid Zone

From the Arctic Circle (66½°N) to the North Pole (90^0N) and from the Antarctic Circle (66½°S) to the South Pole (90°S), the Sun's rays fall further inclined, through out the year. The temperature is very low. Hence, this region is known as **Frigid Zone.**

Some lines of latitude are also called by the following names in Tamil.

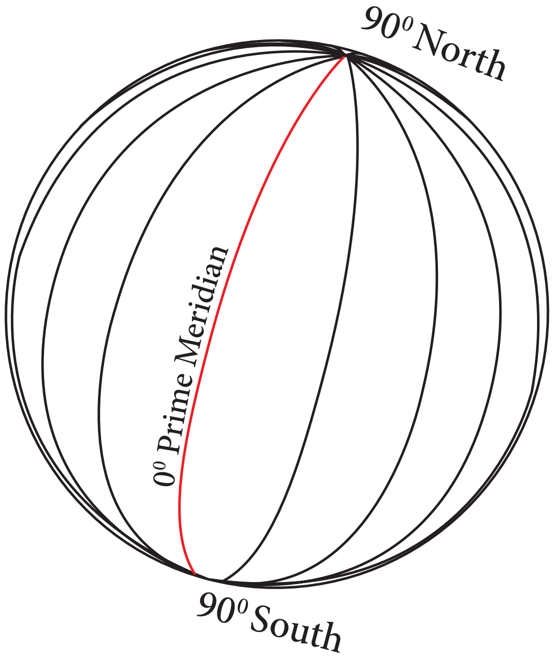
Latitude	-	ahalangu (அகலாங்கு)
Longitude	-	nettangu (நெட்டாங்கு)
Equator	-	nilanaduvarai (நிலநடுவரை)
Tropic of Cancer	-	kadagavarai (கடகவரை)
Tropic of Capricorn	-	magaravarai (மகரவரை)

(Source: Ariviyal Kalanjiyam, The Tamil University)

Longitudes

The imaginary lines drawn vertically connecting the North Pole and the South Pole are called lines or meridians of longitude. These lines of longitude are seen as semi circles.

The 0° line of longitude is called the **Prime Meridian**. There are 180 lines of longitude towards the East and West from the Prime Meridian. So, there are totally **360 lines of longitude**. These lines converge at the poles. The 180° W and 180° E line of longitude are the same line.

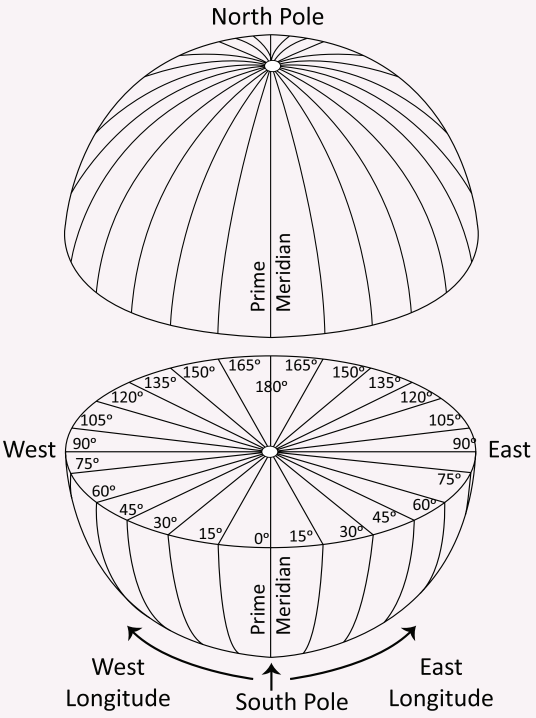


The lines of longitude that are found between the Prime Meridian and the 180° East line of longitude are called **'Eastern Longitudes'** and the lines of longitude that are found between the Prime Meridian (0°) and the 180° West line of longitude are called **'Western Longitudes'**. Two opposite meridians form a great circle

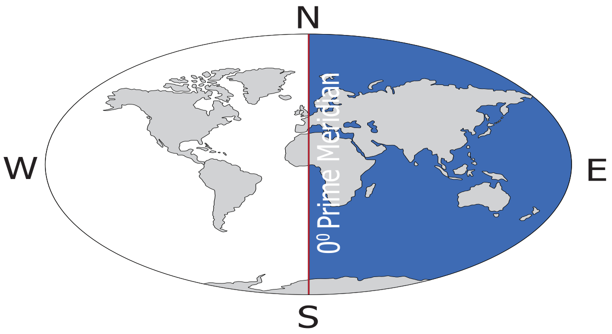
The lines of longitude are found as semi circles covering 111 km at the Equator, 79 km at 45° latitude and no space between the lines at the poles.

Activity :

Take a ball and a thin iron wire. Pierce the ball with the wire from one end to the other end through the middle. Remove the wire. Draw circles around the points. Name the northern most point as North Pole and the southern most point as South Pole. The angle of a circle is 360°. Mark points on the circle at an interval of 15° using a protractor. Then draw lines joining these points on the top and bottom of the ball. The lines that you have drawn are lines of longitudes.

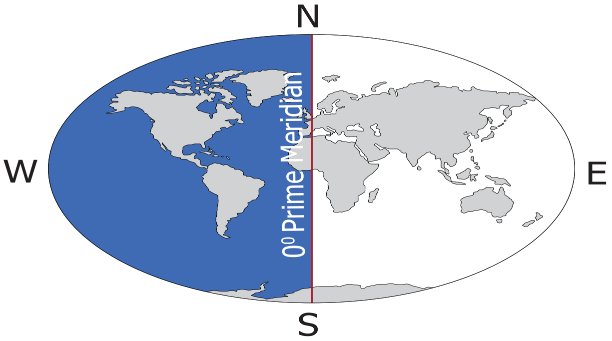


Eastern Hemisphere



The part of the Earth between the 0° line of longitude and the 180° East line of longitude is known as the **Eastern Hemisphere.**

Western Hemisphere



The part of the Earth from 0° line of longitude to 180° West line of longitude is called as **Western Hemisphere.**

Activity

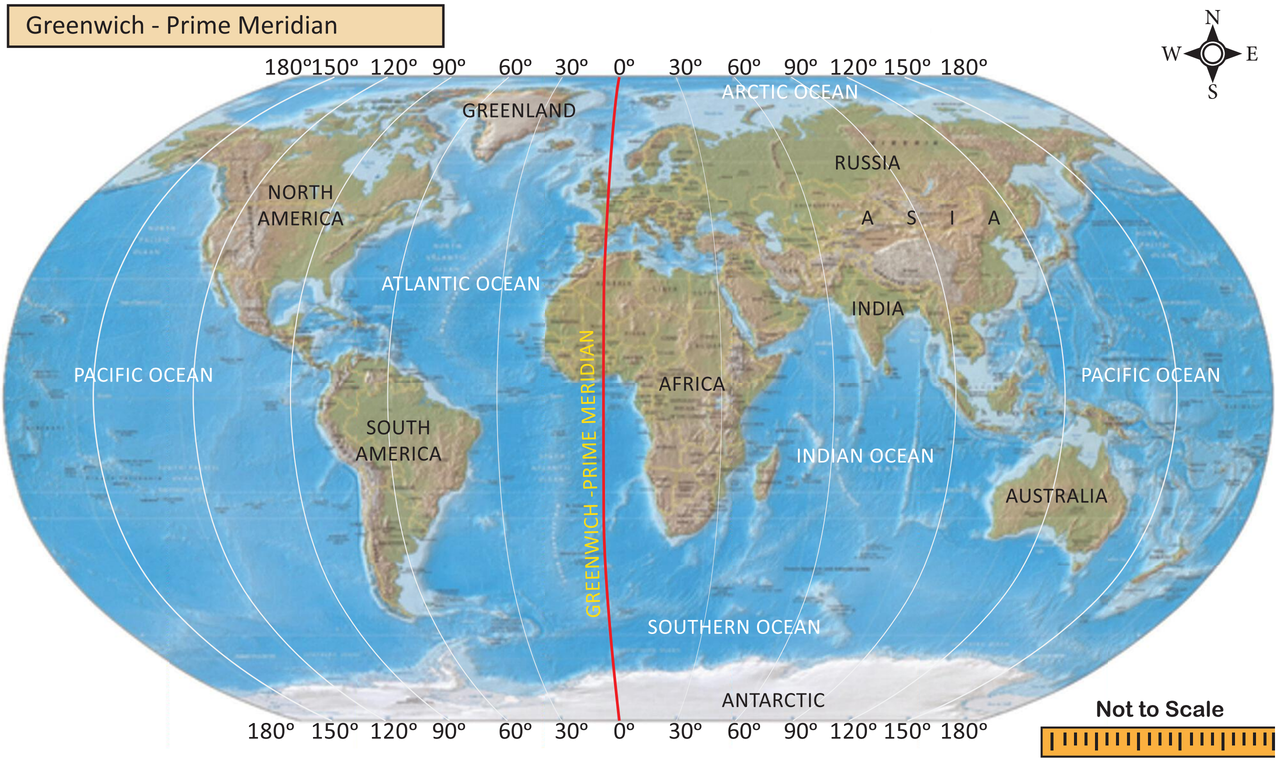
Based on the longitudinal extent, in which hemisphere is our country located? Look at the globe and answer.

Significant Lines of Longitude

Greenwich Meridian

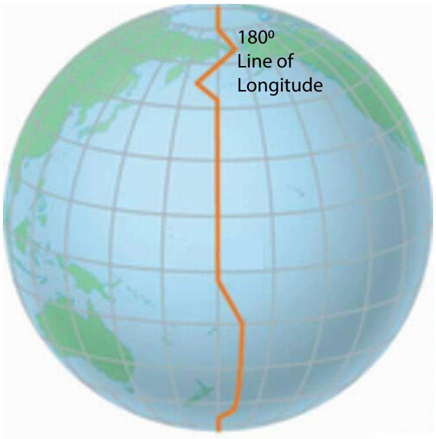
The Royal Astronomical Observatory is located at Greenwich near London in England. According to the International Meridian Conference held in 1884 in

Washington DC in the U.S.A. all nations agreed on choosing the Greenwich Meridian as the international standard meridian (0°). This line of longitude is called the Prime Meridian and it is also known as the **Greenwich Meridian** because it passes through Greenwich.

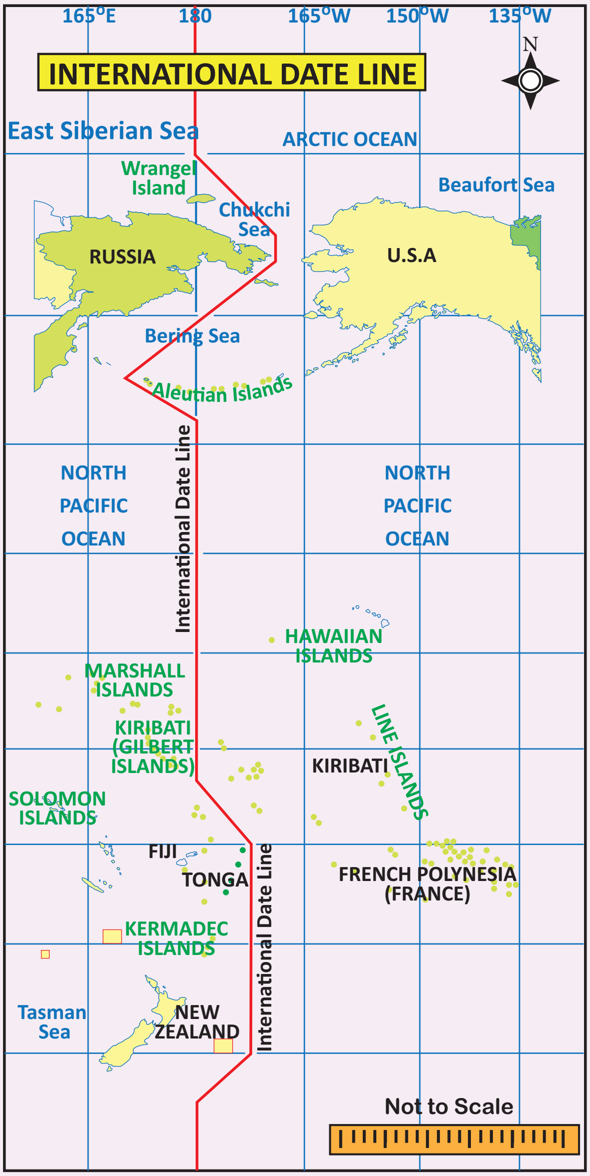


International Date Line

The 180° line of longitude has been fixed as the International Date Line, drawn on the Pacific Ocean between Alaska and Russia through Bering Strait. If a person crosses this line from the West to East, he loses a day. On the other hand, when he crosses from the East to West, he gains a day. Based on this, the date is fixed for different countries or regions of the world.

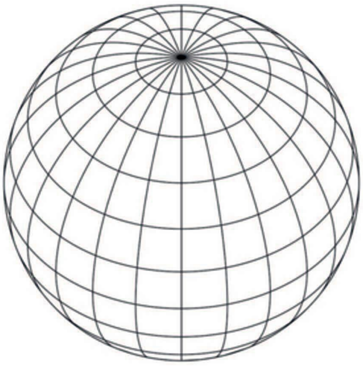


DO YOU KNOW? The International Date Line is not straight. If the line is drawn straight, two places in the same country would have different dates. So the International Date Line is found zigzag in certain places to avoid confusion.



Earth Grid

The imaginary lines of latitude and longitude form a grid like pattern on the surface of the earth, known as the **'Earth grid'** or **'Geographic grid'.**



Earth grid

To locate a place exactly on earth, the latitudinal and longitudinal extensions are required.

Longitude and Time

As many as **360 lines of longitude** are drawn to connect the North and South Poles around the Earth 180° on the Eastern Hemisphere and 180° on the Western Hemisphere. Time is calculated on the basis of the lines of longitude.

Fact

- ☐ The Earth takes one day to rotate on its axis.
- ☐ 1 day = 24 hours
- ☐ 1 hour = 60 minutes
- ☐ 24 hours = 24 x 60 = 1440 minutes
- ☐ The angle of the earth = 360 °
- ☐ 360 ° = 360 Longitudes
- ☐ 360 ° = 1440 minutes
- ☐ So 1 ° = $\frac{1440}{360}$ = 4 minutes
- ☐ In 4 minutes = 1°rotation
- ☐ In 60 minutes = $\frac{60}{4}$ = 15° rotation
- ☐ So, in an hour (60 minutes) the earth rotates 15°

Local Time

When the sun is overhead on a particular line of longitude, it is 12 noon at all the places located on that line of longitude. This is called local time.

The Sun is overhead on a line of longitude only once in a day. So the local time differs for every line of longitude.

When the Sun is overhead the Greenwich Meridian at 12 noon, it is the local time of that place. The world time is calculated by this standard line of longitude. It is known as the **Greenwich Mean Time (GMT).**

For example, if the time is 12 noon at Greenwich Meridian, it is **12:04 p.m.** at 1°E line of longitude and **11:56 a.m.** at 1°W line of longitude. So, as one moves towards the east from any meridian the time increases. And if one moves towards the west from any meridian, time decreases.

DO YOU KNOW?

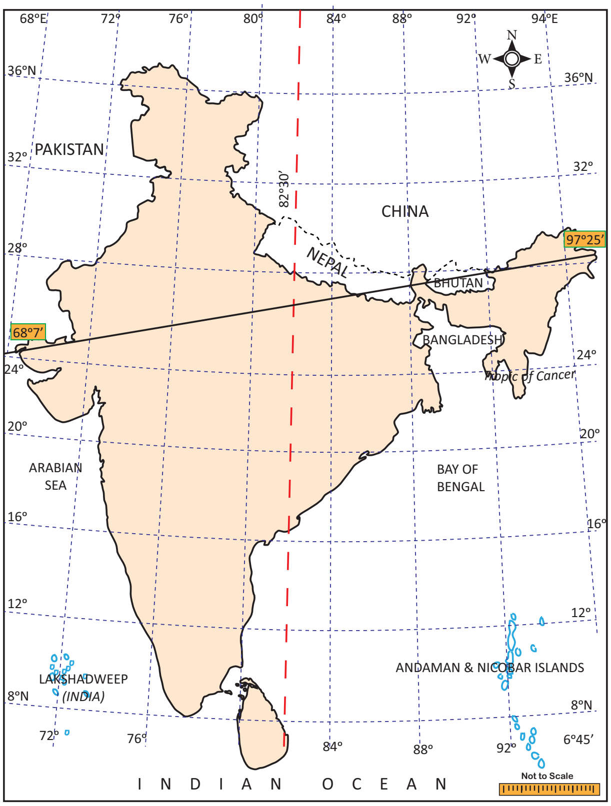
1. The word meridian is derived from the Latin word **'Meridianus'.** It means mid day. **(Medius – Middle, dies – day)**. So, meridian means the position of the Sun found overhead at a place at noon.
2. **a.m**. means 'anti Meridiem' **(anti – before)** – Before Noon.
3. **p.m**. means 'post Meridiem' **(Post – after/later)** – After noon.

Standard Time

Local time is calculated when the sun is overhead at noon. Many lines of longitude may pass through a country. Countries may or may not observe a common time. The standard time of a country or a part of it is calculated keeping a particular meridian as a standard one.

The meridians are selected in multiples of 15° or 7 ½°. It is done in such a way that the variation of standard time from the Greenwich is expressed either as 1 hour or ½ an hour.

Indian Standard Time



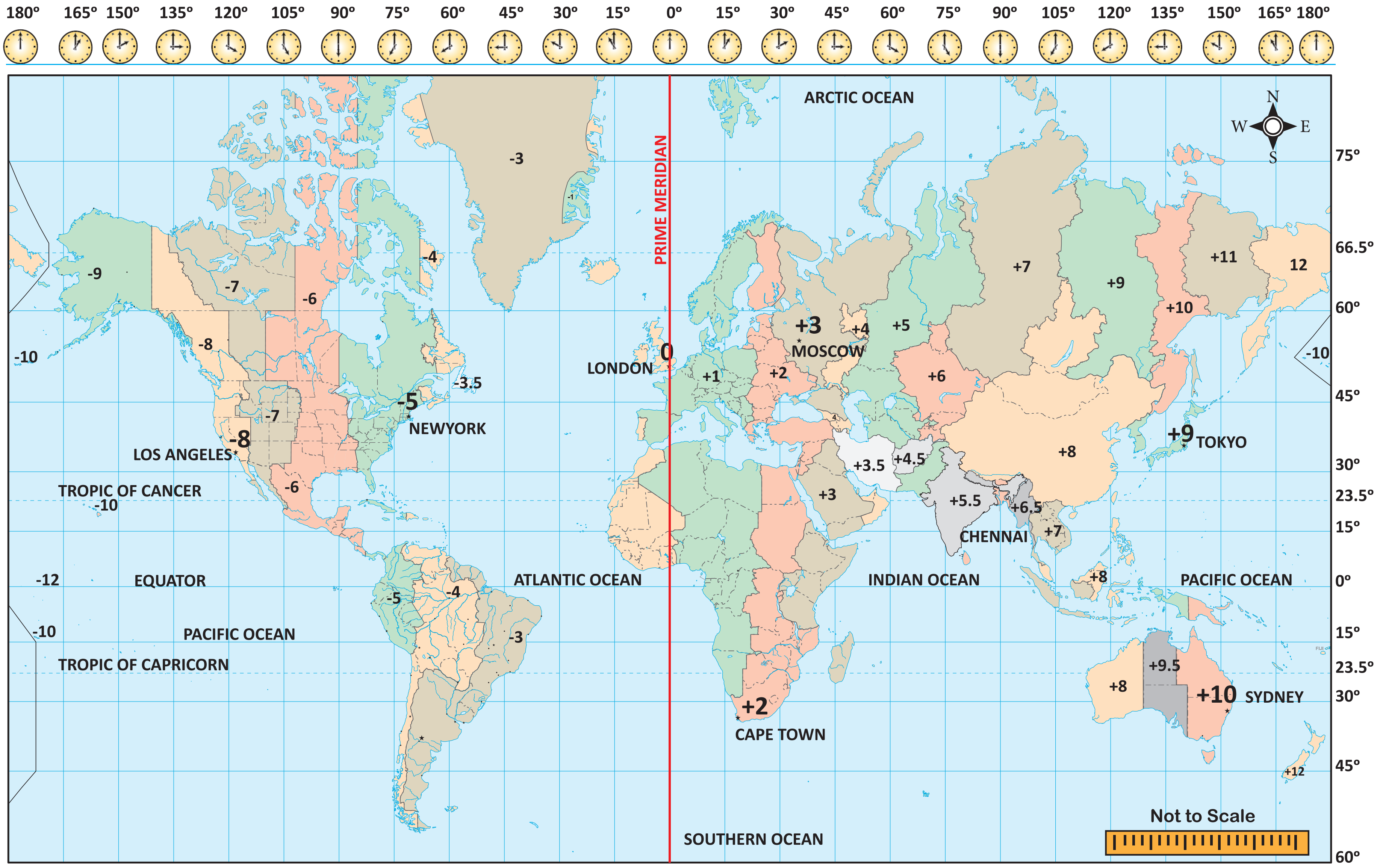
INDIAN STANDARD MERIDIAN

The longitudinal extent of India is from 68°7′ E to 97°25′ E. As many as twenty nine lines of longitude pass through India. Having 29 standard time is not logical. Hence 82½° E line of longitude is observed as the Prime Meridian to calculate the Indian Standard Time **(IST)**.

DO YOU KNOW?

The 82½°E line of longitude passes through **Mirzapur** near **Allahabad in Uttar Pradesh**. This is located at an equal distance from **Ghuar Mota** in **Gujarat** and **Kibithu** in **Arunachal Pradesh**.

World Time Zone



Time Zones

The world has 24 time zones. Some countries have a great longitudinal extent. So they have more than one standard time. Example: Russia has 7 time zones.

Activity:

1. What is the difference in time between the GMT and IST?
2. If it is 5 a.m. at New York City, USA. what would be the time at New Delhi, the capital of India?
3. If it is 12 Midnight at London, what would be the time in India?
4. The standard time of Sydney city in Australia is found to be at a difference of __________ hours from that of the GMT.
5. Mr. Senthamizh travels by flight from Chennai to London. He boarded the aeroplane at 9a.m After 12 hours of travel, at what time (GMT) would he have reach London?

We saw about the lines of latitude and longitude drawn on the globe. Besides these, physical land forms, seas, oceans, countries etc., are also found on the globe

Wrap up

1. The imaginary lines drawn horizontally from the East to West on the globe and maps are called lines of latitude or parallels.
2. The imaginary lines drawn vertically from the North to South on the globe and maps are known as lines of longitude or meridians.
3. The 0° line of latitude is called the Equator.
4. The 0° line of longitude is called the Greenwich Meridian or the Prime Meridian.
5. The part of the Earth from the Equator (0°) to North Pole (90°) is called the Northern Hemisphere and from the Equator (0°) to South Pole (90°) is called the Southern Hemisphere.
6. The part of the Earth from the Greenwich Meridian (0°) to 180° East line of longitude is called the Eastern Hemisphere and from Equator (0°) to 180° West line of longitude is called the Western Hemisphere.
7. Lines of latitude are circles which are drawn at a distance of about 111 km. The poles are shown as points.
8. Lines of longitude are drawn as semi circles. The distance between the lines of longitude at the Equator is 111 km. It is found at a distance of 79 km at 45° latitude and they converge at the poles.
9. Lines of latitude do not merge, while lines of longitude converge at the poles.
10. Time is calculated on the basis of the lines of longitude. The 180° line of longitude is the International Date Line.

Glossary

1.	Globe	– A model of the earth
2.	Lines of Latitude / Parallels	– Imaginary lines drawn horizontally on the Earth from the East to West
3.	Lines of Longitude / Meridians	– Imaginary line drawn vertically on the Earth from the North to South
4.	Geoid	– The shape of the Earth
5.	Hemisphere	– Dividing the earth on the basis of 0° lines of latitude and longitude with regard to directions
6.	Equator	– The line of latitude drawn horizontally at the centre of the Earth
7.	Tropic of Cancer	– 23 ½° N line of latitude
8.	Tropic of Capricorn	– 23 ½° S line of latitude
9.	Arctic Circle	– 66 ½° N line of latitude
10.	Antarctic Circle	– 66 ½° S line of latitude

Exercise

3NPA2

I. Choose the correct answer

1. The shape of the Earth is ______________
   a) Square b) Rectangle
   c) Geoid d) Circle

2. The North Pole is
   a) 90° N Latitude
   b) 90° S latitude
   c) 90° W Longitude
   d) 90° E longitude

3. The area found between 0° and 180° E lines of longitude is called
   a) Southern Hemisphere
   b) Western Hemisphere
   c) Northern Hemisphere
   d) Eastern Hemisphere

4. The 23 ½° N line of latitude is called ______________
   a) Tropic of Capricorn
   b) Tropic of Cancer
   c) Arctic Circle
   d) Antarctic Circle

5. 180° line of longitude is
   a) Equator
   b) International Date Line
   c) Prime Meridian
   d) North Pole

6. The Sun is found overhead the Greenwich Meridian at
   a) 12 midnight
   b) 12 noon
   c) 1 p.m.
   d) 11 a.m.

7. A day has _____________.

a) 1240 minutes
b) 1340 minutes
c) 1440 minutes
d) 1140 minutes

8. Which of the following lines of longitude is considered for the Indian Standard Time?

a) 82½° E
b) 82½° W
c) 81½° E
d) 81½° W

9. The total number of lines of latitude are

a) 171
b) 161
c) 181
d) 191

10. The total number of lines of longitude are

a) 370
b) 380
c) 360
d) 390

II. Fill in the blanks

1. The line of latitude which is known as the Great Circle is ______________.
2. The imaginary lines drawn horizontally on Earth from the West to East are called _____________.
3. The 90° lines of latitude on the Earth are called _____________.
4. The Prime Meridian is also called ______________
5. The world is divided into ____________ time zones.

III Circle the odd one

1. North Pole, South Pole, Equator, International Date Line.
2. Tropic of Capricorn, Tropic of Cancer, Equator, Prime Meridian.
3. Torrid Zone, Time Zone, Temperate Zone, Frigid Zone
4. Royal Astronomical observatory, Prime Meridian, Greenwich Meridian, International Date Line.
5. 10° North, 20° South, 30° North, 40° West

IV. Match the following

A	B
0° line of latitude	Pole
0° line of longitude	International Date Line
180° line of longitude	Greenwich
90° line of latitude	Equator

V. Examine the following statements

1. The Earth is spherical in shape.
2. The shape of the Earth is called a geoid.
3. The Earth is flat.

Look at the options given below and choose the correct answer

a) 1 and 3 are correct

b) 2 and 3 are correct

c) 1 and 2 are correct

d) 1,2 and 3 are correct

VI. Examine the following statements

Statement I : The lines of latitude on Earth are used to find the location of a place and define the heat zones on Earth.

Statement II : The lines of longitudes on Earth are used to find the location of a place and to calculate time.

Choose the correct option

a) Statement I is correct; II is wrong

b) Statement I is wrong; II correct

c) Both the statements are correct

d) Both the statements are wrong

VII. Name the following

1. The imaginary lines drawn horizontally on Earth.
2. The imaginary lines drawn vertically on Earth.
3. The three dimensional model of the Earth.
4. India is located in this hemisphere based on lines of longitude.
5. The network of lines of latitude and longitude.

VIII. Answer briefly

1. What is a Geoid?
2. What is local time?
3. How many times would the sun pass overhead a line of longitude?
4. What are lines of latitude and longitude?
5. Name the four hemispheres of the Earth.

IX. Give reasons

1. The 0° line of longitude is called the Greenwich Meridian.
2. The regions on Earth between North & South lines of latitude (66 ½°) and poles (90°) is called Frigid Zone
3. The International Date Line runs zigzag.

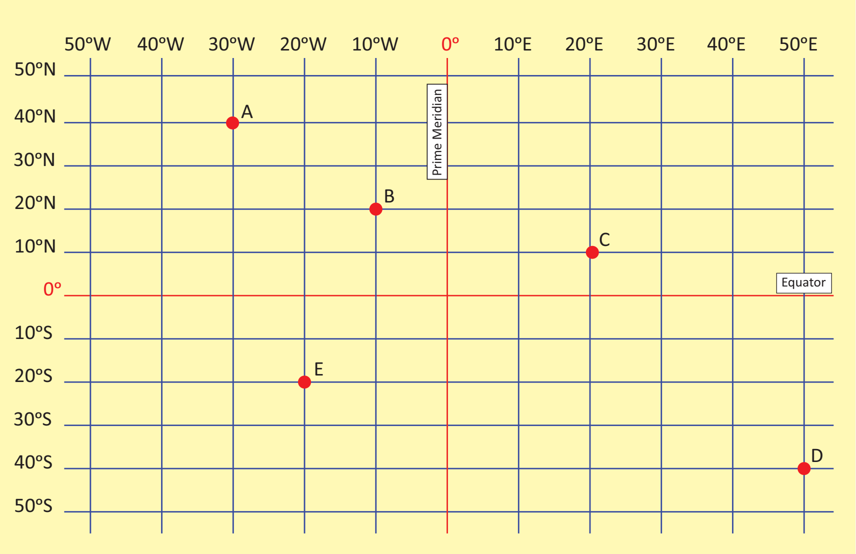
X. Answer in detail

1. What are the uses of globe?
2. How are the hemispheres divided on the basis of lines of latitude and longitude? Explain with diagrams.
3. What are the significant lines of latitude? Explain the zones found between them.
4. Explain: Indian Standard Time.

XI. Activity

There are five positions marked on the grid given below. Look at them carefully and fill the blanks with reference to the lines of latitude and longitude. The first one is done for you.

1. The latitudinal and longitudinal reference of point A 40° N 30° W



Earth Grid

2. The latitudinal and longitudinal reference of point B ____________________
3. The latitudinal and longitudinal reference of point C ____________________
4. The latitudinal and longitudinal reference of point D ____________________
5. The latitudinal and longitudinal reference of point E ____________________

Reference

1. Goh Cheng Leong, Certificate Physical and Human Geography (2009), Oxford University Press, New Delhi, India.
2. A Dictionary of Geography – Susan Mayhew, Oxford University Press, Fifth edition -2015.
3. அறிவியல் களஞ்சியம் (தொகுதிகள்), தஞ்சை தமிழ்ப் பல்கலைக்கழக வெளியீடு.
4. The earth shape and gravity (1965) Oxford Degman Press.
5. Strahler, Physical Geopraphy 4th Edition (1965) New York MC Graw – Hill Book Co.

Web Links

1. https://www.britannica.com
2. https://www.latlong.net

ICT CORNER

Globe

Through this activity you will know about the globe model.

Steps:

Step -1 Use the URL or scan the QR code to open the activity page.

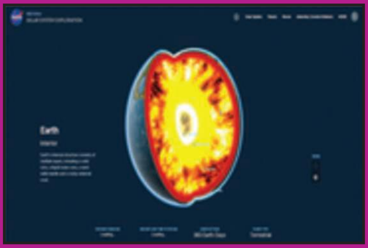
Step -2 Click the red "hot spot" area to see the main landmarks of the globe.

Step -3 In the view box Click the "Core" option to view the Earth's inner layers.

Step -4 Drag and rotate the Globe you can rotate the Globe.

Step 1

Step 2



Step 3

Step 4

Browse in the link

Web: https://solarsystem.nasa.gov/planets/earth/overview/

(or) scan the QR Code

*Pictures are indicatives only.

Unit 3

Understanding Disaster

Learning Objectives

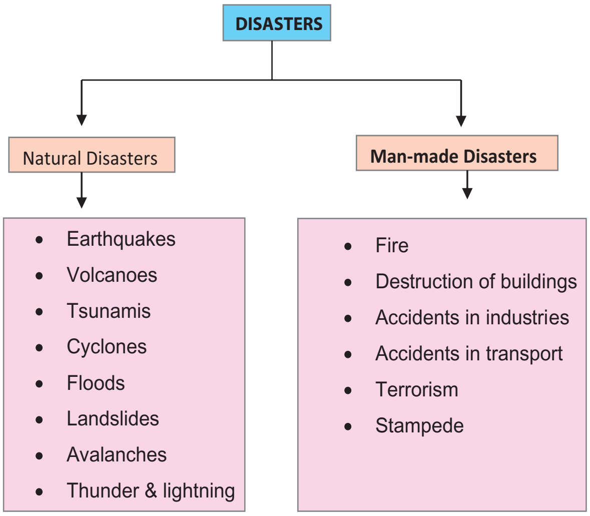
- To understand the meaning of disaster.
- To know about the types of disasters.
- To know a few key concepts in Disaster Management and orient them to the words used in media.
- To understand Tsunami and flood.
- To understand about Forecasting, Emergency Operation Centre etc.,

This lesson explains about the various natural disasters and man-made disasters. It also deals with the precautionary and mitigation measures taken to avoid the loss of lives and materials.

Disaster is a very common phenomenon in the human society. It has been experienced by people since time immemorial. Though its form may be varied, it has been a challenge for society. The latest development which has been discovered in the World Disaster Reports recently is that, the disasters have increased in frequency and intensity. India is one of the most disaster prone countries in the world. It has some of the world's most severe droughts, famines, cyclones, earthquakes, chemical disasters, rail accidents and road accidents. The high density of population in the developing countries, especially in the high risk coastal areas, results in millions of people getting affected by natural disasters, especially in recurring disasters like floods, cyclones, storm surges, etc.

Disaster

'A disaster is a serious disruption of the functioning of a society involving human and material loss. Disaster is broadly classified into natural and man-made disasters.



Natural Disasters

Earthquake

The sudden shaking of the earth at a place for a short spell of time is called an earthquake. The duration of the earthquake may be a few seconds to some minutes. The point where an earthquake originates is called its '**focus**'. The vertical point at the surface from the focus is called '**epicentre**'.

Volcanoes

Volcanoes are openings or vents where lava, small rocks and steam erupt onto the earth's surface.

Tsunami

Tsunami are waves generated by earthquake, volcanic eruptions and underwater landslides.

Cyclones

A low pressure area which is encircled by high-pressure wind is called cyclone.

Floods

An overflow of a large amount of water, beyond its normal limits, especially on the rainfed areas is called flood.

Landslide

The movement of a mass of rocks, debris, soil etc., downslope is called landslide.

Avalanche

A large amount of ice, snow and rock falling quickly down the side of a mountain is called Avalanche.

Thunder and lightning

Thunder is a series of sudden electrical discharge resulting from atmospheric conditions. This discharge results in sudden flashes of light and trembling sound waves which are commonly known as thunder and lightning.

Earthquake

Volcanic explosion

Tsunami

Cyclones

Floods

Landslide

Avalanches

Thunder & lightning

Man-made disasters

Fire

Massive **forest fires** may start in hot and dry weather as a result of lightning, and human carelessness or from other causal factors.

Destruction of buildings

Demolition of buildings by human activites.

Accidents in industries

Chemical, biological accidents that occur due to human error. (e.g.) Bhopal gas tragedy

Accidents in Transport

Violation of road rules, carelessness cause accidents.

Terrorism

The social unrest or differences in principles leads to terrorism.

Stampede

The term **stampede** is a sudden rush of a crowd of people, usually resulting in injuries and death from suffocation and trampling.

Tsunami and floods

A killer Tsunami hit the south east Asian countries on the 26th of December, 2004. A massive earthquake with a magnitude of 9.1 -9.3 in the Richter scale in the Indonesian island of Sumatra. It triggered one of the biggest Tsunamis the world had ever witnessed. The massive waves measuring up to 30 metres that killed more than 2,00,000 people of Asia. In India, over 10,000 people were killed by this disaster. Tamil Nadu alone accounted for 1,705 deaths.

All the coastal districts were affected, Nagapattinam was the worst hit in the state of Tamil Nadu. Fishermen, tourists, morning walkers, children playing in beach and people living on the coast were unprepared for the waves. So they lost their life and the most of the loss of lives and damage to property was within 500 metres of the shore. After that the Indian government set up a Tsunami Early Warning System at Indian National Centre for Ocean Information Services (INCOIS), Hyderabad in 2007.

Fire

Destruction of buildings

Accidents in industries

Accidents in Transport

Terrorism

Stampede

Tsunami - Do's and Don'ts

- You should find out if your home, school etc., are in valunarable areas along sea shore.
- Know the height of your street above sea level.
- Plan evacuation routes and practise your evacuation routes.
- Discuss tsunamis with your family. Review safety and preparedness measures with your family.
- If you see the sea water receding, you must immediately leave the beach and go to higher ground far away from the beach.
- Don't go to the coast to watch the Tsunami.
- Dont try to surf the tsunami waves.
- Be aware facts about tsunami.

Floods

Floods are high stream flows, which overlap natural or artificial banks of a river or a stream and are markedly higher than the usual flow as well as inundation of low land.

Types of floods

Flash floods: Such floods that occur within six hours during heavy rainfall.

River floods: Such floods are caused by Precipitation over large catchment areas or by melting of snow or sometimes both.

Coastal floods: Sometimes floods are associated with cyclone high tides and tsunami.

Causes of floods

- ➢ Torrential Rainfall.
- ➢ Encroachment of rivers bank.
- ➢ Excessive rainfall in catchment.
- ➢ Inefficient engineering design in the construction of embankments, dams and canals.

Effects of floods

- ➢ Destruction of drainage system
- ➢ Water pollution
- ➢ Soil erosion
- ➢ Stagnation of water
- ➢ Loss of agricultural land and cattle
- ➢ Loss of life and spread of contagious diseases.

Do's

- ➢ To find out if the settlement area is to be affected by flood or not.
- ➢ Keeping radio, torch and additional batteries, storing drinking water, dry foods items, salt and sugar. Safeguarding materials like

kerosene, candle, match box, clothes and valuable things.

- ➢ Keeping umbrella and bamboo poles.
- ➢ Keeping first aid box and strong ropes to bind things.
- ➢ To dig canals from the farm land, to drain the excessive water keeping sand bags etc.,

Don'ts

- ➢ Try to connect electricity once it is cut.
- ➢ Operate vehicles
- ➢ Swim against floods
- ➢ Avoid going on excursions.
- ➢ Neglect flood warning messages

During floods

- ➢ Cut off gas connection and electricity.
- ➢ Keep sand bags on drainage holes and bathroom holes.
- ➢ Leave immediately through the known passage or prescribed passage
- ➢ Drink hot water.
- ➢ Use bleaching powder to keep your environment hygienic.
- ➢ Before using match sticks and candles, ensure that there is no gas leakage.
- ➢ Don't eat more food when you are affected by diarrhoea.
- ➢ Don't try to take anything that floats in flood.

Disaster Risk Reduction (DRR)

Disaster Risk Reduction: The practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters. There are four key approaches to public awareness for disaster risk reduction. Campaigns, participatory learning, informal education, and formal school based interventions.

CASE STUDY

Chennai flood – 2015

Chennai is one of the largest metropolitan cities in India, which lies on the south eastern coast. The north east monsoon along with tropical cyclone hits Chennai every year and gives heavy cyclonic rainfall. In 2015, November and December due to heavy rain, the devastating floods that hit Chennai and other parts of Tamil Nadu claimed more than 400 lives and caused enormous economic damage. The Government of India and Tamil Nadu have taken a lot of action to reduce loss of life and minimize human sufferings.

Forecasting and Early Warning

Weather forecasting, Tsunami early warning system, cyclonic forecasting and warning provide necessary information which help in reducing risks during disasters.

School Disaster Management Committee, Village Disaster Management Committee, State and Central government institutions take mitigation measures together during disaster.

Newspaper, Radio, Television and social media bring updated information and give alerts on the vulnerable area, risk, preparatory measures and relief measures including medicine.

Glossary

Mitigation: The lessening of the adverse impacts of hazards and related disasters.

Forecast: Definite statement or statistical estimate of the likely occurrence of a future event or conditions for a specific area.

Magnitude: A measure of the amount of energy released by an earthquake.

Contagious: Transmissible by direct or indirect contact .

Catchment: The action of collecting water, especially the collection of rainfall over a natural drainage area.

Exercise

I Answer in brief

1. Define Disaster
2. What are the types of disasters? Give examples.
3. Write a short note on 'Thunder and lightning'
4. Chennai, Cuddalore and Cauvery delta are frequently affected by floods. Give reason.
5. Differentiate: Landslide – Avalanche

II Answer in a paragraph

1. What is flood? Explain the do's and don'ts during floods.

III Activity

Make a flood plan

On a piece of paper, draw your village/town map roughly. Locate your home,school and playground on the map. Then draw the rivers/stream/lake and road, located nearest to your village/ town. Answer the questions listed below.

1.Which areas and roads would be mostly affected by flood?

2. Can you find out evacuation route?

3. If you live in a flood-prone area, what are the precautionary measures you have to take during heavy rains?

4. What are things that you should have in your 'Go- Kit' / 'Drive -away kit'?

5.Make a list of emergency numbers.

('Go-Kit' - A kit prepared by and for an individual or group who expects to develop it in alternative locations during emergency)

ICT CORNER

Understanding Disaster

Through this activity you will know about prevention activities before cyclone through a game.

Steps:

Step -1 Use the URL or scan the QR code to open the "storm safe" game page.

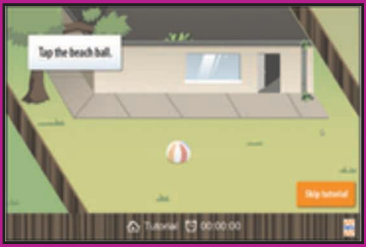
Step -2 Click the "play" icon to enter the game page

Step -3 Click the "continue" button start the game.

Step -4 Drag and put weightless things in the house.

Step 1

Step 2



Step 3

Step 4

Browse in the link

Web: http://www.vicses.com.au/stormsafe-game/ (or)
scan the QR Code

*Pictures are indicatives only.

CIVICS

Unit 1

Democracy

Learning Objectives

- To know the meaning of democracy
- To know the types of democracy
- To know and appreciate the structure of our constitution
- To know the aims of democracy

'குடிதழீஇக் கோலோச்சும் மாநில மன்னன்
அடிதழீஇ நிற்கும் உலகு'

The world will constantly embrace the feet of the great king who rules over his subjects with love.

The teachers of Nallur Government High School were doing the final preparations for the programme 'Let's know the society' a monthly event. The Singaravelar Hall was filled with students. The Headmaster Mr. Jeeva welcomed the Chief Guest of the day, Advocate Mr. Rajasekaran. When he brought the chief guest to the hall, the students observed silence.

Mr. Britto, the history teacher welcomed the gathering. The chief guest, Mr. Rajasekaran stood up to address the students.

"Beloved brothers and sisters! I thank you for inviting me to this programme. I'm not going to speak on this occasion." When he said this and paused, everyone looked at him in wonder.

"Democracy should be found everywhere, shouldn't it? So I am going to converse with all of you," he said. He requested to give a microphone to the students. Mr. Rajasekar said,

"First let me ask you a question. Do you know what kind of society did the early man live in?"

"In the beginning, they were hunters and gathered food. Later, they settled near rivers and practised agriculture," said Deepika, a sixth standard student.

"Yes, when man started to live in groups, tribes were formed. Every tribe had its own chief. These groups fought among themselves for land, water and other resources. Those who emerged victorious, formed kingdoms by uniting the other tribal groups. These kingdoms later integrated to form empires."

Arun questioned, "So the chief would have become the king, wouldn't he?"

"Yes, that was how monarchies ruled by kings were formed."

Suganya asked, "Was this how monarchy emerged in our country too?"

"Yes, this was how the system of monarchy formed throughout the world. Also, our country was ruled by kings and emperors and then came under the British rule."

The students answered together, "After centuries of struggle and many sacrifices, we got freedom from British colonialism."

"We adopted democracy as our ruling system when our country got freedom," said Rajasekaran.

Devarajan asked him, "What is democracy?"

"When you start a Sports Club, you'll share the responsibilities. Then you would enjoy its benefits, but share the income and expenditure, wouldn't you?"

"Yes sir"

DO YOU KNOW?

Democracy is 'Government of the people, by the people, for the people'

– **Abraham Lincoln**

"Similarly, the citizens of a country select their representatives through elections. Thus, they take part in the direct governance of a country. This is termed **Democracy**. In a democratic form of government, a considerable amount of power lies with the people of that nation. People can participate in the politics of the country and decision making processes. There are different types of democracy."

"Types of democracy!"

"Yes, there are various types of democracy in practice around the world. Among those, **direct democracy** and **representative democracy** are the most popular forms of government."

DO YOU KNOW?

The birth place of democracy is Greece.

Democracy is a term derived from two the Greek words "Demos" and cratia". 'Demos' means the people and 'Cratia' means the power or rule.

"What is Direct Democracy?" asked Sirajudeen.

"In a Direct Democracy, people have the power to frame laws. If we consider your Sports Club as an example, you all can discuss and amend laws and rules. The perspective of each member is considered and each one expresses his view. But how will you take a final decision?"

"The choice of the majority will be accepted. The others will also give their consent," said Selva.

In a Direct Democracy, only the citizens can make laws. All changes have to be approved by the citizen. The politicians only rule over parliamentary procedure. **Switzerland** has had a long history of a successful direct democracy.

HOTS

Is it possible to practise Direct Democracy in India?

"Yes, this system is actually known as Direct Democracy," said Rajasekaran.

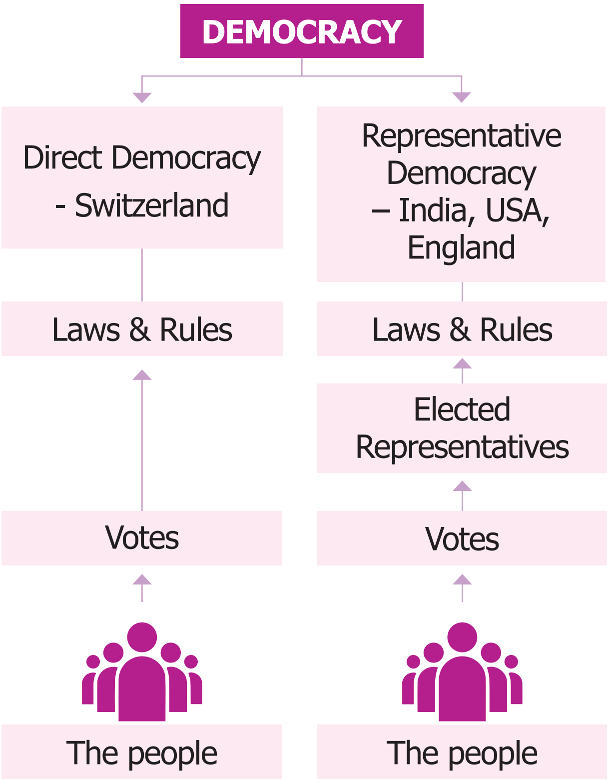
"What do you mean by Representative Democracy?"

"Imagine that your Sports Club has more number of members now. Is it possible for hundreds of them to gather and discuss to take various decisions?"

"No sir"

"In that case, all the members should be represented by a group of representatives, shouldn't they?"

"Yes," agreed the students in union.



"Those group members will administrate the sports club on behalf of all the other members. To select these representatives, elections are held. For example, many contest for the post of the Head, Secretary, Treasurer and members of the administration group.

In the end, those who gain the maximum number of votes will be given the posts. On behalf of the other members, they obtain the power to take decisions in a democratic manner. This is termed as Representative Democracy."

REPRESENTATIVE DEMOCRACY

Parliamentary Democracy	Presidential Democracy
• India	• USA
• England	• Canada

"What is meant by democratic decision making?" questioned Judith.

"In the system of democracy, the power to take decisions does not lie with the Head. On the contrary, a group holds the power, but adheres to the rules and regulations. All the members of the group hold open discussions and take final decisions only when everyone is convinced. This is called democratic way of decision making."

"Are there rules and regulations to govern our country like the rules and regulations of this group?"

Tamil Nadu Legislative Assembly

"Yes. In a highly populated country like India, if people want to live peacefully, they have to follow certain rules and regulations, rights and duties properly. Hence, the constitution of India guides us in all these aspects and plays an important role in maintaining law and order."

DO YOU KNOW?

In 2007, the UNO General Assembly resolved to observe 15th September as the **International Day of Democracy**.

"What are the rights given in our Constitution?"

"Our Constitution ensures freedom, equality and justice to everyone."

"What other features are found in our constitution?"

"It defines the political principles, the structure of the government institutions and methods to follow these rules and regulations, the powers and responsibilities. And also, it fixes the Rights and Duties and the Directive Principles of the citizens. Thus our constitution provides a structure to us."

"Is the constitution of India such a detailed one?" asked Tamizhselvi in amazement.

"Indian Constitution is the longest written constitution in the world. It is drafted by the Drafting Committee of the Constituent Assembly headed by **Dr. B.R. Ambedkar**. That is why we call him as the '**Chief Architect of our Constitution**' Rajasekaran concluded.

The students clapped with joy and thanked him for the simple explanation of democracy.

Aims of Democracy

Democracy is defined as "Government of the people, by the people and for the people."

In a democracy, the power is vested in the hands of the people. For that, the people should have rights to take decisions. Everyone cannot participate in decision making. So, the representative government elected by the people to form a democratic system, all those who attain the age of 18 are given the voting rights to elect the representatives. At the same time, the representatives have the responsibility to protect the welfare of the people.

World Democracy

New zealand is the first country to allow women to vote (1893). Voting rights to women were given in 1918 and 1920 in the UK and USA respectively. At the same time, the wealthy alone were given the voting rights in India. Many leaders like Mahatma Gandhi kept insisting on giving voting rights to all. Now in India, all the people above 18 years of age enjoy Universal Adult Franchise.

The world statistical data on democracy declares that 79% of the Indian citizens have faith in the democratic system. Hence, India ranks first among the democratic countries of the world.

Oldest Democracies in the World

Sl. No.	Democracy	Period	Location	Significance
1	Greek Democracy	5th century BC (BCE)	Greece	Foundation of political philosophy
2	Roman Empires Democracy	300 BC – 50 BC (BCE)	Italian Peninsula, Rome	Loads of expansions of the growth of civilization
3	San Merinos Democracy	AD (CE) 301	Italy	Earliest written constitution still in effect
4	The Iceland Democracy	AD (CE) 930	Thingvellir	The oldest and longest functioning parliament in the world.
5	The Isle of Man's Democracy	AD (CE) 927	Between Great Britain and Ireland	Self governing possessions of the crown
6	British Democracy	13th Century AD (CE)	England	Magna Carta of 1215
7	US Democracy	AD (CE) 1789	United States of America	The oldest standing democracy

GLOSSARY

1. Democracy - a government formed by the people
2. Election - a process by which a representative is chosen
3. Decision - to make up one's mind
4. Government - a group of people with a authority to govern a country

RECAP

- "Government of the people, by the people for the people" is defined as democracy.
- Direct democracy and Representative democracy are the types of democracy.
- Our constitution ensures freedom, equality and justice to everyone.
- Indian constitution is the longest written constitution in the world.
- In India, all the people above 18 years of age enjoy Universal Adult Franchise.

Exercise

I. Choose the correct answer

1. Early man settled near ________ and practiced agriculture.

   a) plains b) bank of rivers
   c) mountains d) hills

2. The birth place of democracy is ________

   a) China b. America
   c) Greece d) Rome

3. ________ is celebrated as the International Democracy Day.

   a) September 15 b) October 15
   c) November 15 d) December 15

4. Who has the right to work in a direct Democracy?

   a) Men b) Women
   c) Representatives d) All eligible voters

II. Fill in the blanks

1. Direct Democracy is practised in ________
2. The definition of democracy is defined by ________.
3. People choose their representatives by giving their ________.
4. In our country ________ democracy is in practice.

III. Answer the following

1. What is Democracy?
2. What are the types of democracy?
3. Define: Direct Democracy.
4. Define: Representative Democracy.
5. What are the salient features of our constitution that you have understood?

IV. HOTs

1. Compare and contrast direct democracy and representative democracy.

V. Activitys

1. Find out your area's representative's names and write down

   a) MP b) MLA c) Local body member

2. Discuss about the merits and demerits of democracy.

ICT CORNER

Democracy

Through this activity you will know about structure of government of India and political systems.

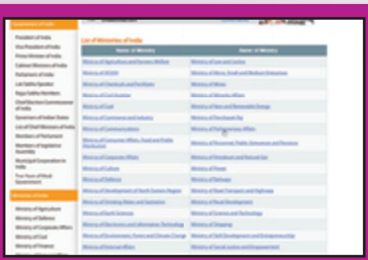
Steps:

Step 1: Use the URL or scan the QR code to open the activity page.

Step 2: Click the "**political systems**" to know government of India.

Step 3: Click the "**English**" button the map will appear.

Step 4: Choose and click "Tamilnadu" to know about the state government.



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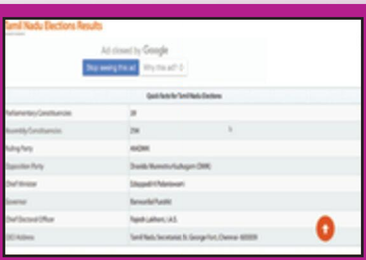

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Step 4

Browse in the link

Web: http://www.elections.in/ (or) scan the QR Code

*Pictures are indicatives only.

Unit **2**

Local Bodies – Rural and Urban

Learning Objectives

- To know about the structure and functions of rural and urban local bodies.
- To know about the Grama Sabha and the purpose of Grama Sabha meeting.
- To understand the special features of Panchayatraj.
- To know about the participation of women in local bodies.
- To know about the election of local body and will observe the forthcoming election.

Nandhini is in standard VI. It was her custom to read the headlines in the newspaper loudly to her parents Mr. Namburajan and Mrs. Manimegalai. They would clear her doubts. Sometimes, children from their neighbourhood would also join her and each one will read an article loudly. As it was a Saturday, Johnson, Maran and Anwar were also in Nandhini's house. Nandhini started to read an article from the newspaper.

"Avadi as been declared as corporation"

She was about to read the next heading, but she had a doubt and asked her father.

"Father, what is a corporation?"

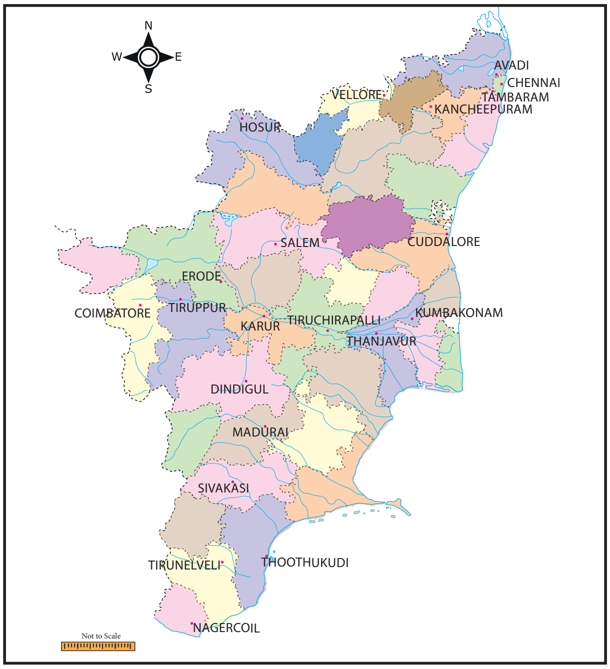
"The Government of Tamil Nadu will declare certain municipalities based on above Ten laks population and high revenue. That's how Avadi has been declared as a corporation too", said her father Namburajan.

"Oh, if that is so, are there other corporations that exist already?"

"Yes, there are 21 corporations in Tamil Nadu, " said Namburajan.

The List of corporations in Tamil Nadu

1. Chennai	2. Madurai	3. Coimbatore
4. Tiruchirapalli	5. Salem	6. Tirunelveli
7. Erode	8. Thoothukudi	9. Tiruppur
10. Vellore	11. Dindigul	12. Thanjavur
13. Nagercoil	14. Hosur	15. Avadi
16. Kancheepuram	17. Karur	18. Cuddalore
19. Sivakasi	20. Tambaram	21. Kumbakonam



DO YOU KNOW?

The Chennai Corporation which was founded in 1688 is the oldest local body in India.

"Father, what about the place we live in" enquired Maran.

"We live in a Panchayat, Maran".

"What is a Panchayat?"

"There are villages as well as cities in Tamil Nadu, aren't there?"

"Yes, father".

"Won't the needs of villages and cities differ? Our constitution has provided certain structures to fulfill the needs of the people.

Accordingly, the urban local bodies are categorized into City Minicipal Corporations, Municipalities and Town Panchayats, while the rural local bodies are categorised into Village Panchayats, Panchayat Unions and District Panchyats. These are together known as local bodies."

"Oh, are there so many divisions?"

"Yes, I'll tell you about them. Didn't I tell you about the City Municipal Corporations?"

"Yes, father".

"Those areas which have a population of more than one lakh and a high amount of revenue and is found in the level below the City Municipal Corporation is called a **Municipality**.

DO YOU KNOW?

- **Walajahpet Municipality** is the first Municipality in Tamil Nadu.

"You mentioned something about towns".

"A Town Panchayat has about 10,000 population. A **Town Panchayat** is between a village and a city.

There is something special about the Town Panchayat. Can anyone tell me what is it?", asked Namburajan. Everyone was gazing at him. But none answered.

"Well, I'll tell the answer myself.

Tamil Nadu was the first state to introduce a town Panchayat in the whole of India".

All were amazed on hearing it.

A City Municipal Corporation has a **Commissioner,** who is an Indian Administrative Service (IAS) officer. Government officials are deputed as **Commissioners** for the municipalities. The administrative officer of a Municipality is an **Executive Officer** (EO).

"You mentioned about Panchayats and Panchayat Unions".

The **Village Panchayats** are the local bodies of villages. They act as a link between the people and the government. Villages are divided into wards based on their population. The representatives are elected by the people.

The Elected Representatives

1. Panchayat President
2. Ward members
3. Councillor
4. District Panchayat Ward Councillor

Panchayat Union

Many village Panchayats join to form a **Panchayat Union**. A **Councillor** is elected from each Panchayat, isn't it? Those councillors will elect a Panchayat Union **Chairperson** among themselves. A **Vice Chairperson** is also elected. A **Block Development Officer** (BDO) is the administrative head, of a Panchayat Union.

The services are provided on the Panchayat Union level.

DO YOU KNOW?

The Nilgiris and **Perambalur** Districts have the lowest number of Panchayat Unions (4).

District Panchayat

A District Panchayat is formed in every district. A district is divided into wards on the basis of 50,000 population. The ward members are elected by the Village Panchayats. The members of the District Panchayat elect the **District Panchayat Committee Chairperson.** They provide essential services and facilities to the rural population and the planning and execution of development programmes for the district.

The local bodies are governed by the representatives elected by the people. The constituencies are called wards. People elect their ward members.

The Mayor of the City Municipal Corporation and the **Municipal Chairperson** are the elected representatives of the people. The people elect them. The Corporation **Deputy Mayor** and the Municipal **Vice Chairperson** are elected by the ward councillors" finished Namburajan.

"What are the benefits of local bodies, uncle?"

"There are many benefits. The services provided can be divided as obligatory functions and discretionary functions. These are provided by the local bodies.

Functions of the village Panchayat

Obligatory Functions

- Water supply
- Street lighting
- Cleaning roads
- Drainage & sewage pipes system
- Laying down roads
- Activation of Central and State Government schemes

Discretionary Functions

- parks
- Libraries
- Playgrounds, etc.

Functions of the City Municipal Corporation

- Drinking water supply
- Street Lighting
- Maintenance of Clean Environment
- Primary Health Facilities
- Laying of Roads
- Building flyovers
- Space for markets
- Drainage System
- Solid waste management
- Corporation schools
- Parks
- Play grounds
- Birth and Death registration, etc.

"So, who does all these works?"

"As per the decisions taken in the Council meetings, the commissioner or officers assign these works to their subordinate officers or other servants. Thus, they all work in various levels to get these public works done".

"Will the Government provide funds for these services, father?"

"The Government directly allots funds for these works. The local bodies also collect revenue".

Revenue of the Village Panchayat

- House tax
- Professional tax
- Tax on shops
- Water charges
- Specific fees for property tax
- Specific fees for transfer of immovable property
- Funds from Central and State Governments, etc.

Revenue of the City Municipal Corporation

- House Tax
- Water Tax
- Tax on shopping complexes
- Professional Tax
- Entertainment Tax
- Vehicle Charges
- Funds by Central and State Government, etc.

"How are the Grama Sabha meetings

Activity

- Distinguish between rural and urban revenue and functions.
- Find out from your home: The taxes paid by your family.

held, uncle?” asked Maran.

“Grama Sabha meetings? In movies, I have seen elders sitting under trees and discussing important matters and take decisions,” said Johnson.

“No, no, both are different. A Grama Sabha is formed in every Village Panchayat. It is the only permanent unit in the Panchayat Raj System. Grama Sabha meetings are held even in smaller villages. The Grama Sabha is the grass root level democratic institution in a Village Panchayat”.

Those who have attained the age of 18 years and whose names are found in the electoral roll of the same Panchayat can take part in a Grama Sabha meeting. The Grama Sabha meetings are conducted four times a year. Officers like the District Collector, the Block Development Officer, Panchyat President, Vice President, and Ward Members etc., also participate in this meeting. The people can freely express their needs and grievances”.

When are these meetings convened?

January 26, May 1, August 15 and October 2.

Apart from these days, the meetings can be convened as per need or during emergency. These are called Special Grama Sabha meetings.

Activity

The teacher guides the student to visit the Grama Sabha meeting.

“Mahatma Gandhi advocated Panchayat Raj as the foundation of India’s political system, as a form of government, where each village would be responsible for its own affairs. The Panchayat Raj Act was enacted on April 24, 1992”.

DO YOU KNOW?

April 24 is National Panchayat Raj Day.

Special features of Panchayat Raj

- Grama Sabha
- Three tier local body governance
- Reservations
- Panchayat Elections
- Tenure
- Finance Commission
- Account and Audit, etc

“Thank you very much, uncle. We really learnt a lot about local bodies”, said the children gratefully.

“I’m very happy that I could share so much with you today. That’s enough of reading newspapers. Go out and play now”, said Namburajan.

The children ran out to play joyously.

Activity

The Central Government gives awards to the best performing Village Panchayats. Find out if your village has received such awards.

Role of women in the Local Self Government

All local bodies have a reservation of 33% for women. In the 2011 Local Bodies election, 38% seats were won by women. As per the Tamil Nadu Panchayats (Amendment) Act, 2016, 50% reservation for women is being fixed in Panchayat Raj institutions.

Activity

Find out about the ward members of your area. Talk to the women members and discuss about their participation and experiences.

Local Body Election

The tenure for the representatives of local self Government is 5 years. The election to the Local Bodies is held once in five years by the State Election Commission. Every state has a State Election Commission. The Tamil Nadu State Election Commission is situated in Koyambedu, Chennai.

Local Bodies of Tamil Nadu (At present)

Village Panchayats	-	12,525
Panchayat Unions	-	388
District Panchayats	-	36
Town Panchayats	-	490
Municipalities	-	138
Municipal Corporations	-	21

(Source: Tamil Nadu State Election Commission. www.tnsec.tn.nic.in)

Think it over

- Do you think the above numbers are stable? Find out about the recent changes.
- What is the number of votes cast by rural and urban voters in a local body election?

Works carried out by local bodies durings natural disasters and out break of diseases.

A-Z GLOSSARY

Town Panchayat	-	பேரூராட்சி
Municipality	-	நகராட்சி
Corporation	-	மாநகராட்சி
Village Panchayat	-	கிராம ஊராட்சி
Panchayat Union	-	ஊராட்சி ஒன்றியம்
District Panchayat	-	மாவட்ட ஊராட்சி

RECAP

- Local bodies are structures to fulfill the needs of people.
- Panchayat, Panchayat Union and District Panchayat are rural local bodies.
- Town Panchayat, Municipality and Corporation are urban local bodies.
- Grama Sabha is the only permanent unit in a village Panchayat.
- Panchayat Raj System strengthened the local bodies.
- The election of local bodies take place in every five years.

Exercise

I. Choose the correct answer

1. ________ is set up with several village panchayats
   a) Panchayat Union
   b) District Panchayat
   c) Taluk
   d) Revenue village

2. _________ is National Panchayat Raj Day.
   a) January 24
   b) July 24
   c) November 24
   d) April 24

3. The oldest urban local body in India is __________.
   a) Delhi
   b) Chennai
   c) Kolkata
   d) Mumbai

4. The head of a corporation is called a __________.
   a) Mayor
   b) Commissioner
   c) Chair Person
   d) President

II. Fill in the blanks

1. __________ is the first state in India to introduce town Panchayat.
2. The Panchayat Raj Act was enacted in the year __________.
3. The tenure of the local body representative is __________ years.
4. __________ is the first municipality in Tamil Nadu.

III. Match

Grama Sabha	-	Executive Officer
Panchayat Union	-	State Election Commission
Town Panchayat	-	Block Development Officer
Local body election	-	Permanent Unit

IV. Answer the following

1. Is there any corporation in your district? Name it.
2. What is the need for local bodies?
3. What are the divisions of a rural local body?
4. What are the divisions of a Urban local body?
5. Who are the representatives elected in a Village Panchayat?

6. List out a few functions of corporations.
7. List out a few means of revenue of village Panchayats.
8. When are Grama Sabha meetings convened? What are the special on those days?
9. What are the special features of Panchayat Raj system?
10. What is the importance of Grama Sabha?

V. HOTs

1. Local bodies play an important role in the development of villages and cities. How?

VI. Activities

1. Prepare a questioner to interview a local body representative.
2. Discuss; If there is a contribution to the improvement of your school by local body representatives
3. If I were a local body representative, I would.....
4. Find out the number of local bodies in your district and list them.

Name of the District	Village Panchayat	Panchayat Union	District Panchayat	Town Panchayat	Municipality	Corporation

ICT CORNER

Local body

Through this activity you will know about the local body structure of India.

Steps:

Step 1: Use the URL or scan the QR code to open the activity page.

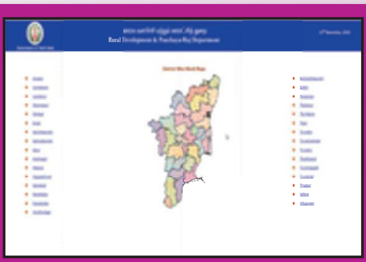
Step 2: Click the "panchayat Raj" to know about panchayat rules and acts.

Step 3: Click the "Scheme" to know about state and central schemes of panchayat raj.

Step 4: Click the "map" option to know how many panchayat raj in tamilnadu.

Step 1

Step 2



Step 3

Step 4

Browse in the link

Web: https://www.tnrd.gov.in/index.html (or) scan the QR Code

*Pictures are indicatives only.

Unit 3

Road Safety

Learning Objectives

- To understand about the importance of road safety.
- To know about the road rules and traffic signals.
- To learn about the road safety measures and strategies and ensure the safety of lives.

'Caution and care, make accident rare'

Traffic rules are the laws that govern how, when and why you are allowed to drive any vehicle. The traffic safety course education plays an important role in shaping the attitude and behaviour of children and young people ensuring to become responsible drivers, passengers, pedestrians and cyclists.

Keeping the children safe at all times can be tricky when you cannot be with them always.

Parents and teachers ensure the safety of the children at home and school. But who keeps them safe on the road? Therefore educating children about road safety is very important. Teaching about road safety to children can be started as soon as they are old enough to step out of the home.

Three types of traffic signs – Mandatory, Cautionary and Informatory

I. **Mandatory road signs** are the ones that give order regarding do's and don'ts and are to be followed strictly. These are generally circular in shape.

No entry

One Way

No right turn

No left turn

No U turn

II **Cautionary road signs** are the ones that warn the road user regarding the road situation ahead. Cautionary signs are generally in triangular shape.

Narrow Bridge

Cross road

School

Left hand curve

Men at work

III **Informatory road signs** are the ones that give information regarding directions, destination, etc. Informatory signs are generally rectangular in shape.

Petrol Pump

Hospital

Eating Place

Parking

Railway station

	Blue circles give a positive instructions, about what is to be done.
	Red rings or **circles** give negative instructions. What should not be done.

Know your signals

What do the three colours red, amber and green signify?

RED means STOP- Wait behind the stop line.

- If there are no lines, stop before the traffic light at the intersection so that traffic light is clearly visible.
- Wait until a green signal appears before proceeding.
- You may turn left while the signal is red, if it is not prohibited by a sign. But give importance to pedestrians and other traffic.

AMBER means CAUTION-You may move on if the amber appears after you have already crossed the stop line or when you feel that your stopping may cause accident. Anyhow be extra careful.

GREEN means GO – Proceed ahead ensuring that the way is clear.

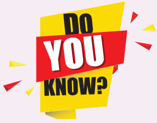
- You can make a right or left turn if not prohibited by signs, but take special care and give way to pedestrians crossing the road.

- GREEN ARROW means that you can go in the direction shown by the arrow.

Cross roads and pedestrian crossing

Children have a tendency just to sprint across the street, as they like. Educate the children to never run across or along the road. Children can get distracted easily and leave their parent's hand to run or sprint away.

Children should cross only at pedestrian crossing.



Pedestrian Crossing

The pedestrian crossing was instituted in Britain in 1934. The roads were marked by dotted lines. On the pavement there were striped Belisha beacon light poles named after Britain's Minister of transport L. Horre-Belisha . The Zebra crossing with black and white stripes was developed after the Second World War.

Road signs, markings, traffic signals and other traffic devices are there to guide the road users and hence are the languages of the road. Every road user, whether a pedestrian, two-wheeler rider, driver of four-wheeled vehicle should have knowledge regarding these traffic controlling devices and should be aware of what they signify. **Traffic signs are there to regulate traffic, warn about hazards and to guide the road user.**

Always use pavements

Children must use the pavements while walking on the road.

Pedestrian

Do's

- Walk on any side of the road if there are footpaths.
- On roads without footpath walk on your extreme rightside facing the oncoming traffic.
- Use zebra crossing, foot over bridge & subways to cross the roads.

- Where such facilities are not available be extra cautious while crossing the road.
- Children below 8 years of age should cross the road with the help of elders.
- Cross the road when the vehicles are at a safe distance.
- Wear light coloured dresses during night.

Don'ts

- Don't cross the road hastily by running.
- Don't cross the road in front of or in between parked vehicles.
- Don't try to cross the road from blind corners, turnings where you are not visible to the vehicle drivers.
- Don't jump over the railings to cross road.

Staying safe on a bicycle

Most children use bicycle to go to schools. So they should be aware of the road rules and road safety. Moreover they should maintain their bicycles in good condition.

Do's

- Cycle must be fitted with standard gadgets – bell, brakes, rearview mirror, both front and back mudguard painted white, reflective tapes affixed at the front and back.
- Cycle on the extreme left side of the road or use service road, if available
- Avoid busy roads.
- Keep a safe distance from fast motorized vehicles.
- Give proper indications before stopping or turning.

Don'ts

- Don't indulge in any kinds of stunts
- Don't load the cycle with another person or heavy goods.
- Don't ride holding onto other fast moving vehicle.

While commuting in School transportation

Dos

- Get up early and start early from home.
- Board the bus from the designated bus stop in a queue.
- Once inside the bus, behave properly.
- Hold on to the railings of the bus.
- Alight only at the designated bus stop.
- Get down only when the bus has stopped completely.
- If the driver is not following the road safety norms, bring it to the notice of school authorities/parents or traffic helpline.

Don'ts

- Do not rush or run to catch your bus.
- Do not stand on the steps of the bus.
- Do not make noise that may distract the driver.
- Do not put any part of the body outside the bus.
- Do not get in or get down from a moving bus.

As pillion rider/co-passengers

- Always wear helmet/seatbelt.
- Do not indulge in talking with the driver.
- Children above 12 years of age should occupy the back seat.

Play at safe places

- Do not play on roads.
- Look for a playground or vacant land to play
- Do not play around a vehicle parked inside your school premises/colony or near your residence.

Exercise

I. Answer the following

1. Prepare slogans for road safety.
2. Identify the following signs.

a.	b.
c.	d.

3. Discuss about the statistics of 2017 accidents data.
4. Debate: Is wearing helmet necessary?
5. Draw posters related to road safety.

ICT CORNER

Road Safety

Through this activity you will know abut safety rules and Road safety.

Steps:

Step 1: Use the URL or scan the QR code to open the activity page.

Step 2: Click the "Start" icon to enter the game page.

Step 3: Choose and Click any game you can start the game.

Step 4: Play and Finish the Game Step by Step.

Step 1

Step 2

Step 3

Step 4

Browse in the link

Web: https://www.sdera.wa.edu.au/programs/smart-steps/izzy-games/

*Pictures are indicatives only.

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